Town of Windham New Hampshire



SITE PLAN REGULATIONS

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SECTION 100 - PURPOSE

The purpose of these Regulations is to provide for Planning Board review and approval or disapproval of all site plans for the development of land, as well as redevelopment or change of use, whether or not such development includes a subdivision or re-subdivision of the site.

The Site Plan Review provisions set forth herein are intended to protect the public health and safety, promote the general welfare of the community and conserve the environment by encouraging construction which is designed and developed in a manner which assures that adequate provisions are made for traffic safety and access; pedestrian and bicycle safety and access; emergency access; water supply; sewage disposal; site aesthetics; management of stormwater, erosion, and sedimentation; protection of groundwater; consideration of wildlife habitat, and unique natural areas; protection of historic and archaeological resources; reduction of adverse impacts on adjacent properties; and harmonious placement into the fabric of the community.

SECTION 200 - AUTHORITY

These regulations are adopted pursuant to the authority given Planning Boards in NH RSA 674:43, Power to Review Site Plans and RSA 674:44, Site Plan Review Regulations.

SECTION 300 - APPLICABILITY

- **301** Unless exempted under Section 302, site plan approval by the Planning Board shall be required for:
 - **301.1** The erection, construction, redevelopment or enlargement of buildings, structures and their accessory structures.
 - **301.2** Construction of new, or expansion of existing, impervious surfaces and drainage features.
 - **301.3** The establishment of a new or expansion of an existing nonresidential use, even if no structures are proposed, including but not limited to uses such as gravel pits, cemeteries, golf courses and other nonstructural nonresidential uses.
 - **301.4** Change of use to another non-residential use, or expansion of an existing non-residential use, if it increases the intensity of on or offsite impacts not already approved under a previous Site Plan Application.
 - **301.5** The conversion of an existing building, in whole or in part, from a residential use to a nonresidential use or a mixed use.
 - **301.6** Intentionally Omitted
 - **301.7** The construction of a multifamily structure or the conversion of an existing residential structure containing one or two dwelling units to a multifamily structure.
 - **301.8** Any proposal for the construction of more than one duplex dwelling on a single lot as specified in the Windham Zoning Ordinance allowing such use.

Exempted Uses – Site Plan approval is not required in the following circumstances:

- **302.1** Routine maintenance or replacement in-kind to structures or property without expansion.
- **302.2** Interior modifications to a structure without changing or adding to the intensity of the use.
- **302.3** Development of a one-family or a duplex residential structure on a lot (except in the case of Open Space Residential Developments), including any associated impervious surfaces or drainage structures.

- **302.4** Temporary uses at existing approved non-residential sites that do not permanently increase traffic, parking, signage or lighting of the site provided that:
 - The temporary use goes through the Community Development Department's Technical Review Committee (TRC) Process and there are no outstanding concerns by TRC members;
 - 302.4.2 A Temporary Sign Permit has been applied for and approved, if applicable; and
 - 302.4.3 The temporary use does not exceed 30 days within a 12 month period
- **302.5** Timber harvesting and forest management activities in keeping with spirit and intent of NH RSA 227-G:1.
- **302.6** Installation of solar energy systems on a site and/or non-residential building, if a majority of the power is to be used by those located on the site on which the systems are located, per NH Public Utility Commission (NH PUC) net metering rules.
- **302.7** Change of use of existing non-residential space, which is a permitted use per zoning, and does not constitute an expansion of use.
- **302.8** In cases where there is uncertainty as to whether a development proposal is subject to Site Plan Review, the Code Enforcement Administrator or other duly authorized agent shall make a determination, in writing, as to whether site plan review is required.

303 Minor Site Plan/Change of Use

- 303.1 All site plan applications shall follow the Major Site Plan process unless it is requested by the applicant and determined by the Planning Board that an application qualifies as a Minor Site Plan/Change of Use.
- **303.2** To request an application be heard as a Minor Site Plan/Change of Use application, the applicant shall submit a letter describing the proposed development or change-of-use and addressing the items listed in Section 303.3 below.
- **303.3** Minor Site Plan/Change of Use Applications must describe how they meet the following criteria, as applicable:
 - 303.3.1 The purpose of the plan is for a minor change of use or expansion of use.
 - 303.3.2 The site plan will have minimal traffic impact on the surrounding road network.
 - 303.3.3 There is no increase of access ways to public streets.
 - Any proposed lot grading does not exceed 15% of the parcel's total square footage, with a maximum allowed increase of 1,500 sqft.
 - **303.3.5** Existing drainage systems can accommodate the proposed additional drainage needs.
 - Increase in gross floor area does not exceed 25% of the existing gross floor area with a maximum allowed increase of 500 sq. ft.
 - Expansion of impervious surface does not exceed 25% of the existing impervious area, and does not to exceed 1,200 sq. ft.
 - 303.3.8 There are no unusual or special conditions which require supplemental information for Planning Board and outside third party review, such as engineering, traffic, legal, etc.

- **303.3.9** Indicate whether the application is:
 - **303.3.9.1** A site plan review of development of a lot for single family or duplex use when required by subdivision approval.
 - **303.3.9.2** A—new or expanded structure or use required for public safety purposes.
 - **303.3.9.3** A multi-family housing project with three (3) dwelling units.
 - **303.3.9.4** An other application qualifying as "minor"
- 303.4 The Planning Board will review the letter and the justification submitted for meeting the criteria outlined in Section 303.3, discuss the reasons for or against classifying the proposal as a Minor Site Plan/Change of Use, and vote whether or not to deem the application a Minor Site Plan/Change of Use Application.
- **303.5** If the Planning Board determines that the Application does not qualify as a Minor Site Plan/Change of Use, the application will be deemed a Major Site Plan and must follow the procedure and processes for that type of application. The submitted Minor Site Plan/Change of Use Application will be heard as a Preliminary Major Site Plan Application.

304 Major Site Plan

All Site Plan Applications not submitted and approved as a Minor Site Plan/Change of Use Application will follow the Major Site Plan Application process.

SECTION 400 - DEFINITIONS

For the purposes of these regulations, the definitions listed below shall apply. In the case of any word or phrase not defined below, it shall be given the meaning as defined in the Windham Zoning Ordinance, or state law. In the absence of any provided definition, the usual and customary definition of such words or phrase shall apply.

Aquifer Protection District: See Section 609 of the Windham Zoning Ordinance.

Certified Site: A site meeting program qualification which has received some level of approval by the Planning Board and has been accepted by the Southern New Hampshire Planning Commission (SNHPC) for inclusion in its certified site program known as "ReadySetGo!"

Certified Site Program: Program administered by the Southern New Hampshire Planning Commission (SNHPC) under the name "ReadySetGo!" that non-residential property owners and/or applicants can participate in through obtaining certain levels of approval from the Planning Board. Such approved sites, after final selection by SNHPC, are advertised and promoted as a "certified site" ready to go for development/redevelopment purposes

Cobbetts Pond and Canobie Lake Watershed Protection Ordinance: See Section 616 of the Windham Zoning Ordinance.

Development: Any construction or land grading activity

Expansion of Use: Means any increase in dimension, size, area, volume, or height, any increase in the area of use, any placement of a permanent structure or part thereof where none existed before, any improvement that would allow the land to be more intensely developed, any increase in intensity of use based on a review of the previous nature, function or purpose of the use, the hours of operation, traffic, parking, noise, exterior storage, signs, exterior lighting, types of operations, types of goods or services offered, odors, or area of operation.

Flood Plain District: See Section 607 of the Windham Zoning Ordinance.

Historic Building/Structure: A building/structure included on a list prepared by the Heritage Commission dated May 2010, as may be updated, pursuant to RSA 674:44-b(I)(a) of the 18th, 19th and 20th Century Buildings of the Town of Windham.

Impervious surface: Any modified surface that cannot effectively absorb or infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, and unless designed to effectively absorb or infiltrate water, decks, patios, and paved, gravel, or crushed stone driveways, parking areas, and walkways.

May: To be construed to mean permitted but not mandatory.

Multi-Family: A residential structure containing three or more attached dwelling units occupied exclusively for residential purposes. Multi-family dwellings do not include commercial accommodations for transient occupancy.

Open Space Residential Developments: See Section 611 of the Zoning Ordinance.

Planning Board: Shall also be known as "the Board".

Redevelopment: Any new construction on a site that has pre-existing uses.

Routine Maintenance: Simple, small-scale activities associated with regular and general upkeep of a building, property, or equipment against normal wear and tear.

Shall: To be construed to mean mandatory and not discretionary.

Should: To be construed to mean highly encouraged.

Solid Waste: Shall include those products and materials commonly referred to as trash, garbage, refuse, by-products or rubbish generally consisting of items and substances either discarded or intended to be discharged by the public, commerce or industry including, but not limited to: biodegradable food, kitchen, paper, wood, cloth and general household wastes; recyclable materials such as paper, glass, metals, plastics, batteries, tires, automotive parts and the like; construction and demolition wastes; electrical appliances and equipment; grease; hazardous and/or toxic wastes including paints, chemicals, petroleum products, light bulbs, fertilizers, pesticides, herbicides, fungicides and medical wastes.

Stormwater: Surface water run-off from a non-point source caused by a storm event.

Wetlands and Watershed Protection District: See Section 601 of the Windham Zoning Ordinance.

SECTION 500 - GENERAL STANDARDS

Site Plan Review shall be required in all circumstances set forth in Section 301 unless excluded by Section 302. The review of any site plan-conducted by the Planning Board under these regulations shall ascertain that adequate provisions have been made by the owner or his authorized agent for the following:

- On-site and off-site traffic circulation and access including adequacy of adjacent streets, entrances and exits, traffic flow, sight distances, curb cuts, turning movements or turning lanes, existing or recommended traffic signalization, and projected relocation or widening of streets.
- **502** Pedestrian safety and access.
- Adequacy of the off street parking and the loading facilities, and the safety and circulation of off street parking and loading facilities (except in Open Space Residential Developments).
- No detrimental effect on the community in the areas of danger or injury to health, safety, or general well being by reason of water supply, traffic generation, pollution, such as but not limited to noise, light or odor, drainage, or the requirement for public service which necessitates an excessive expenditure of public funds for the supply of services.

- Protection of the districts in which the site is located and adjoining districts against detrimental or offensive uses or structures on the site.
- Adequacy of the methods of disposal for sewage, refuse, and other wastes resulting from the uses permitted on the site and the methods of drainage for storm waters from its impervious surfaces.
- Preservation, where feasible, of historic and archeological features, as well as the protection of natural land features of the site.
- Landscaping that improves the general character of the surrounding area.
- Signing and exterior lighting that provides adequate site lighting without over lighting the site or adjacent properties while minimizing light pollution (except in Open Space Residential Developments).
- A buffer zone consisting of an existing vegetated or planted screen, berm, or by a solid fence or wall (except in Open Space Residential Developments).
- **511** Emergency water supplies.
- 512 Cross parcel access, where physically feasible, and potentially legally obtainable, for parking lots, driveways, roads, sidewalks and/or access isles.
- In addition, the Planning Board shall review the site plan to assure compliance with the provisions of the zoning ordinance and the minimization of encroachment on neighboring land uses.

SECTION 600 - SITE PLAN APPLICATION AND REVIEW PROCESS

The requirements to be followed when an application is submitted are listed below.

601 Conceptual Consultation Application

- **601.1** In accordance with RSA 676:4 II (a), the applicant may choose to undertake a conceptual consultation of an application with the Planning Board prior to the formal submission of a Major or Minor Site Plan Application.
- 601.2 The conceptual consultation provides an opportunity for the applicant and the Planning Board to discuss the concept of the proposal in the context of the Master Plan, Zoning Ordinance and Site Plan Review Regulations and for the Board to provide guidance to the applicant.
- **601.3** All discussions during the conceptual consultation phase are non-binding.
- **601.4** Submissions for conceptual consultation shall adhere to the following procedures:
 - 601.4.1 The applicant shall submit material in accordance with the posted Planning Board submission schedule for the meeting at which the applicant is requesting to be heard.
 - **601.4.2** The applicant shall submit a letter of intent detailing the proposal.
 - 601.4.3 The applicant shall submit a conceptual site plan that provides basic features of the proposal. Conceptual sketches shall show sufficient information about the development to form a clear basis for discussion of potential problems and for the preparation of the Major or Minor Application.
- 601.5 The conceptual consultation does not require formal notification of abutters nor is public testimony required to be taken, although the Planning Board can choose to do so.

602 Minor Site Plan Application

- **602.1** Application and Submittal
 - The applicant shall submit material in accordance with the posted Planning Board submission schedule for the meeting at which the applicant is requesting to be heard.
 - 602.1.2 The material submitted shall include the following:
 - **602.1.2.1** A letter of intent detailing the proposal.
 - **602.1.2.2** Completed Minor Site Plan application form and checklist with a written explanation of all items marked "not applicable/NA".
 - **602.1.2.3** Applicable fees, in accordance with the adopted fee schedule.
 - 602.1.2.4 Required number of copies of the Site Plan as stated in the Application form, showing existing and proposed changes that are drawn to scale.
 - **602.1.2.5** Requests to waive any of the Regulations
 - **602.1.2.6** Memo detailing how Section 303.3 is satisfied
 - 602.1.2.7 One list of abutters, as defined in RSA 672:3, including the abutters' addresses, as shown not more than five days before the day of filing and 2 sets of mailing labels for the certified mailings to notify abutters.
 - **602.1.2.8** Copies of Notices of Decision for any variances received from the ZBA.
- **602.2** Determination of Completeness, Public Hearing and Decision
 - An application shall be determined to be complete when all items listed in Section 602.1.2 have been provided and staff has determined that the application meets all Zoning Ordinance requirements.
 - 602.2.1.1 A completed application sufficient to invoke jurisdiction of the Board shall be accepted by the Board only at a public meeting, with notice as provided in RSA 676:4(I)(d)
 - **602.2.1.2** Within sixty-five (65) days of the formal acceptance of the complete application, the Board shall vote to approve, approve with conditions or disapprove the proposed site plan per RSA 676:4(I)(c)(1) unless waived or extended as provided by law.
 - 602.2.2 If the Board determines that the application is not complete, it will not be accepted and no public hearing will be held. The applicant shall be notified of the determination in accordance with State law.
 - All conditional approvals are valid for a period of not more than 180 days, unless the Planning Board, at their discretion, chooses to extend the number of days required to meet precedent conditions. All precedent conditions of approval must be met within this 180 day period (or time period established by the Planning Board at time of conditional approval) or the approval shall be considered null and void. In cases where extenuating circumstances prevent the meeting of precedent conditions within 180 days, the applicant may request an extension, to be filed (in writing and with justification) with the Board no later than 14 days prior to the

- expiration day of the conditions. The Planning Board shall then vote on whether or not to grant such extensions.
- One copy of the approved Minor Site Plan shall be on Mylar and 3 paper copies submitted to the Town with original stamps and signatures on the Mylar plan set.
- Applicants are required to submit the final approved Site Plan in electronic format on CD as an Adobe pdf file.

603 Major Site Plan Application

- **603.1** Preliminary Application
 - The Preliminary Application is more detailed than the Conceptual Application and involves more specific design and engineering details;
 - The applicant shall submit the following material in accordance with the posted Planning Board submission schedule for the meeting at which the applicant is requesting to be heard.
 - 603.1.2.1 A brief description of the land characteristics and a summary of the major development constraints and opportunities along with a brief description of the proposed development.
 - **603.1.2.2** Completed Preliminary Site Plan application form and a letter of intent detailing the proposal.
 - **603.1.2.3** Applicable fees, in accordance with the adopted fee schedule.
 - 603.1.2.4 List of any potential waiver requests that will be submitted with the Final Site Plan Application.
 - 603.1.2.5 Required number of copies of the Site Plan as stated in the Application form and PDF of the site plan.
 - 603.1.2.6 One list of abutters, as defined in RSA 672:3, including the abutters' addresses, as shown not more than five days before the day of filing and 2 sets of mailing labels for the certified mailings to notify abutters.
 - 603.1.2.7 Existing Conditions plan that clearly illustrates the location of wetlands, and Wetland and Watershed Protection Districts; Zoning District lines including but not limited to the Aquifer Protection District, Cobbetts Pond and Canobie Lake Watershed Protection District and Flood Plain District; site topography (2 foot contours); stonewalls, historic and archeological features; major bodies of water and other—ecological features; existing easements, rights-of-way, roads, and trails; and High Intensity Soil Surveys (HISS soil types). This plan shall be stamped by a licensed engineer, land surveyor, NH certified soil scientist and wetlands scientist, as applicable.
 - **603.1.2.8** Proposed Conditions Plan that clearly shows the proposed development of the site, including buildings, roads, buffers/landscape areas, limits of tree clearing, easements, trails, open space/undeveloped areas, stormwater infrastructure, and parking.
 - **603.1.2.9** Copies of Notices of Decision for any variances received from the ZBA.

- 603.1.3 Determination of Completeness, Public Hearing and Decision
 - An application shall be determined to be complete when all items listed in Section 603.1.2 have been provided and staff has determined that the application meets all the Zoning Ordinance requirements.
 - 603.1.3.1.1 A completed application sufficient to invoke jurisdiction of the Board shall be accepted by the Board_only at a public meeting, with notice as provided in RSA 676:4(I)(d)
 - 603.1.3.1.2 Within sixty-five (65) days of the formal acceptance of the complete application, the Board shall vote to formally end the Preliminary Review Process and shall inform the applicant in writing within 10 days of such determination.
 - 603.1.3.2 If the Board determines that the application is not complete, it will not be accepted and no public hearing will be held. The applicant shall be notified of the determination in accordance with state law.
- The Applicant will have a 12-month deadline to submit the Final Plan application during which time the application is not subject to any new or amended Zoning Ordinance Amendments, Site Plan Regulations or Impact Fees.
- 603.1.5 Statements made by Planning Board members shall not be the basis for disqualifying said members or invalidating any action taken per RSA 676:4(II)(b). These discussions are non-binding on the Board as well as the applicant.

603.2 Final Application

- The Final Application may proceed only after proper public hearing and abutter notification, per RSA 676:4(I)(d), has been done.
- The applicant shall submit material in accordance with the posted Planning Board submission schedule for the meeting at which the applicant is requesting to be heard.
- **603.2.3** Required Application Material
 - 603.2.3.1 Completed Final Site Plan application form and checklist with a written explanation of all items marked "not applicable/NA".
 - **603.2.3.2** Applicable fees, in accordance with the adopted fee schedule.
 - **603.2.3.3** List of any waiver requests.
 - **603.2.3.4** A letter of intent detailing the proposal.
 - 603.2.3.5 A copy of any covenants or deed restrictions involving land use that are intended to cover all or part of the parcel and will become a part of any subsequent instruments and conveyance.
 - **603.2.3.6** Requested number of copies of the site plan and electronic PDFs of the Site Plan and any related documents
 - 603.2.3.7 One list of abutters, as defined in RSA 672:3, including the abutters' addresses, as shown not more than five days before the day of filing and 2 sets of mailing labels for the certified mailings to notify abutters.

603.2.4 Required Plan Data

- Plans should include the Town's title block, which includes the title of the plan, name of owner of record and address, date plan was prepared and any subsequent revisions, scale of the plan (1" = 50'), name, address and seal of the preparer of the plan, and signature block for the Planning Board's approval of the final plans on every page of the plan set.
- 603.2.4.2 A professional engineer and a land surveyor, registered in the State of New Hampshire, shall prepare, sign and stamp the site plan.
- **603.2.4.3** HISS soil type map stamped and certified by soil scientist recognized by the State of New Hampshire.
- **603.2.4.4** The following statements shall be on the plan:

"When this plan is implemented, the owner or applicant agrees to make all improvements, maintain these improvements including landscaping, as may be approved by the Planning Board and shown on this plan."

Date	
emergency water suppl Standard on Water	new construction will not be issued until the requirements for y have been met per NFPA 1, as amended, and NFPA 1142, Supplies for Suburban and Rural Fire Fighting. These implemented by the Town of Windham Fire Chief or his
Date	Signature
"I hereby certify that downstream drainage f	the site improvements shall have no adverse impact on acilities."
Date	Signature
603.2.4.5 The name	s and addresses of all owners of record of all abutting

- **603.2.4.5** The names and addresses of all owners of record of all abutting properties as appearing in the most recent town assessing records.
- 603.2.4.6 Existing zoning district boundaries, including but not limited to WWPD, Aquifer Protection District, Floodplain District, and the Cobbetts Pond & Canobie Lake Watershed Protection District
- **603.2.4.7** Boundaries of the property, building and setback lines
- **603.2.4.8** Existing and proposed lines of streets, parking and loading areas and surface types, lots, trails, limits of tree clearing, easements, areas dedicated to public use, rights-of-way, and adjacent roads.
- **603.2.4.9** Location of existing and proposed buildings.
- **603.2.4.10** Location of existing and proposed wells, water mains, sanitary sewer systems, culverts and drains on the site and abutting properties, with pipe sizes, grades, and direction flow.
- **603.2.4.11** Existing and proposed contours at two-foot intervals.
- 603.2.4.12 Location of existing historic buildings/structures, stonewalls, archeological and cultural features, wildlife corridors, water courses, wetlands (including vegetation type) and WWPD setbacks, vernal pools, major bodies of water, marshes, rock outcrops, wooded areas, single

- trees with a diameter of twelve (12) inches or more measured three (3) feet above the base of the trunk in areas that are to be disturbed, and other significant existing features.
- 603.2.4.13 The following statement must be entered on the plan when the property falls within the WWPD. "NOTE: No structure may be erected nor shall any alteration of the surface configuration of the land be permitted in the Wetland and Watershed Protection District."
- **603.2.4.14** Location and construction details of the sewage and/or waste disposal system.
- **603.2.4.15** Exterior elevations showing the façade of the proposed buildings to be erected on the site, general/typical floor plans and the building footprint with the egress points indicated. Color rendering are to be provided in a scale where 1" = 20°.
- **603.2.4.16** Location and size of any known wood or stump burial sites
- **603.2.4.17** Proposed lighting and snow storage locations.
- **603.2.4.18** Location and construction details of sign(s).
- **603.2.4.19** Location and construction details of the water system and irrigation systems. Irrigated areas should be reduced to the minimum area needed to maintain landscaping. Irrigation systems shall include moisture sensing devices, timers, and other devices to minimize supplemental watering.
- **603.2.4.20** Vicinity Plan showing the general location of the site in town and north arrow.
- **603.2.4.21** Detail all items, as required, listed in Section 700.
- **603.2.4.22** Landscaping plan prepared and stamped by a licensed landscape architect.
- **603.2.5** Optional Application Material
 - 603.2.5.1 The Planning Board may require additional material/studies, including but not limited to studies on_noise, solid waste, odors, lighting, stormwater, traffic impacts and wildlife, to be submitted as part of the Final Site Plan application, with specific areas and scope of study to be determined by the Board.
 - 603.2.5.2 The Board has the right to have the information reviewed by a third party of their choosing with the cost to be paid for by the applicant.
- **603.2.6** Determination of Completeness, Public Hearing and Decision
 - 603.2.6.1 An application shall be determined to be complete when all items listed in Sections 603.2.3 & 603.2.4 have been provided and staff has determined that the application meets all Zoning Ordinance requirements, which allows the Board to proceed with consideration and to make an informed decision.

- 603.2.6.1.1 A completed application sufficient to invoke jurisdiction of the Board shall be accepted by the Board only at a public meeting, with notice as provided in RSA 676:4(I)(d)
- 603.2.6.1.2 Within sixty-five (65) days of the formal acceptance of the complete application, the Board shall vote to approve, approve with conditions or disapprove the proposed site plan per RSA 676:4(I)(c)(1) unless waived or extended as provided by law.
- **603.2.6.2** If the Board determines that the application is not complete, it will not be accepted and no public hearing will be held. The applicant shall be notified of the determination in accordance with State law.
- days, unless the Planning Board, at their discretion, chooses to extend the number of days required to meet precedent conditions. All precedent conditions of approval must be met within this 180 day period (or time period established by the Planning Board at time of conditional approval) or the approval shall be considered null and void. In cases where extenuating circumstances prevent the meeting of precedent conditions within 120 days, the applicant may request an extension, to be filed (in writing and with justification) with the Board no later than 14 days prior to the expiration day of the conditions. The Planning Board shall then vote on whether or not to grant such extensions.
- 603.2.6.4 One copy of the approved Final Major Site Plan shall be on Mylar and 3 paper copies submitted to the Town with original stamps and signatures on the Mylar plan set.
- 603.2.6.5 Applicants are required to submit the final approved Site Plan in electronic format on CD as an Adobe pdf file.

SECTION 700 - SITE PLAN DESIGN AND CONSTRUCTION STANDARDS

701 General Site Design Standards

- **701.1** Exterior Lighting Provisions
 - All site plans presented to the Planning Board for approval under these Regulations shall include an exterior lighting design plan which provides for a method and level of lighting appropriate for the proposed use or uses. In general, all exterior lighting plans shall be prepared in a manner consistent with the recommended methodology outlined in the <u>Lighting Handbook</u> (10th ed.), as published by the Illumination Society of North America (IESNA).
 - All lighting plans shall, as a minimum, identify the location, mounting height, manufacturer, type, style and intensity of each specified exterior lighting fixture. Illumination levels and light distribution patterns shall be such that all sites subject to these Regulations will enjoy an adequate level of illumination to ensure user safety and security; however, care shall be taken to avoid "over lighting" all or portions of a site, creating nuisance and glare either on the site or at abutting properties, public streets and the neighborhood in general. All lighting fixtures shall be designed to cut-off light distribution above 75 degrees from vertical.

- Lighting fixtures should be equipped with lamps having a Color Rending Index (CRI) value of not less than 60. The use of LED lamps is encouraged.
- 701.1.3 All lighting design plans shall be subject to review and approval by the Planning Board.
- **701.1.4** Electric service shall be provided to all exterior lighting fixtures via underground power supply lines designed and installed in accordance with applicable code requirements.

701.2 Solid Waste Storage Provisions

- 701.2.1 All solid waste storage areas shall be screened and shall be located a minimum of 20 feet from the boundary of any abutting parcel or street.
- 701.2.2 Provisions for adequate storage shall be reviewed by the Planning Board on a case by case basis. In general, the Planning Board shall require:
 - **701.2.2.1** Applicants to disclose anticipated volumes and types of solid waste to be produced by their proposed use(s);
 - **701.2.2.2** The applicant's proposal for storage and disposal of waste to conform to applicable local, state and federal code requirements if any; and
 - **701.2.2.3** The applicant's proposal for temporary storage and disposal to incorporate reasonable safeguards to ensure that such wastes will not become a public or private nuisance.
- **701.3** Snow Storage, Removal and De-icing Management Provisions
 - 701.3.1 All site plans presented to the Planning Board for approval shall identify an area or areas of sufficient size and composition to allow for safe and convenient storage of accumulated snow volumes or include a note indicating that snow is to be removed from the site.
 - Snow storage areas shall not be located such that: accumulated volumes of snow will produce a visual nuisance or impede proper lines of sight; inevitable snow melt will create a nuisance on-site or to abutters; or inevitable snow melt will result in the flow of water onto a public street. Snow shall not be stored in areas of jurisdictional wetland or in parking spaces, aisles, fire lanes, site driveways nor other areas of a site where accumulated snow volumes would create a nuisance, hazard or interfere with normal and routine site operations.
 - All snow management and de-icing will be conducted by a Green SnoPro Certified contractor, according to most current NH DES program standards.

701.4 Signage Provisions

Each site plan presented to the Planning Board for approval shall identify all proposed signage and successfully demonstrate such signage conforms to applicable requirements of the Windham Zoning Ordinance.

701.5 Erosion and Sedimentation Control Provisions

Refer to: Windham Stormwater Regulation (SECTION 1500)

701.6 Prohibition and Mitigation of Offensive Uses

Applicants seeking site plan approval shall disclose the existence of any proposed use having the potential to be deemed an "offensive use", based on its visual, noise, odor or other characteristics that may be a nuisance. No site plan shall be permitted until the applicant has demonstrated to the satisfaction of the Planning Board that the proposed use or uses will not be an "offensive use". In cases where a proposed use or uses of a site have the potential to be an "offensive use", the Planning Board may require appropriate mitigation.

702 Access and Circulation Requirements

- **702.1** General Requirements for Site Access
 - All properties subject to review and approval by the Planning Board under these Regulations, shall be afforded safe and efficient vehicular and pedestrian access to and from public streets and where applicable, public sidewalks. The design and construction of all site driveways, private streets and pedestrian walks intended to satisfy this requirement shall be adequate, in the opinion of the Planning Board, to safely and efficiently accommodate anticipated volumes of site generated vehicular, pedestrian and emergency vehicle traffic. In order to aid the Planning Board in making a finding in regard to this requirement, the Board may, at its option, require an applicant to submit a Traffic Impact Assessment having a specified scope of study. All Traffic Impact Assessments submitted to the Planning Board shall be prepared by a Licensed Professional Engineer.
 - Applicants for site plans intended to derive access from public streets under the jurisdiction of the New Hampshire Department of Transportation (NHDOT) shall be required to obtain a valid NHDOT Driveway Permit prior to receipt of final site plan approval.
 - 702.1.3 All private streets and site driveways subject to approval under these Regulations shall enjoy a measure of all-season safe intersection sight distance sufficient to satisfy the requirements of Section 602.3.1 of the Windham Subdivision Regulations.
 - All private streets shall be designed and constructed in accordance with Section 602.2 of the Windham Subdivision Regulations. In the event one or more private streets are proposed under any site plan review application, the following note shall be placed on the final site plan: "The ways shown on this site plan are intended by the applicant and the Town of Windham to be platted, constructed and maintained as private ways. Neither the approval or recording of this site plan shall be construed as an offer of dedication of those ways as public highways under New Hampshire Law of Dedication and Acceptance."
 - 702.1.5 Pedestrian sidewalks shall be maintained along the frontage of sites at locations where either the Town of Windham or the NHDOT presently maintain sidewalks. The Planning Board may require an applicant to construct or extend sidewalk along all or a portion of the frontage of a property when and if future construction of public sidewalk is planned at that location.
- **702.2** General Requirements for Site Circulation
 - **702.2.1** Individual structures, associated parking and service drives shall be afforded internal access via driveways having a minimum width of 24 feet if intended for two-way travel and a minimum width of 20 feet if intended for one-way travel.

- All sites and structures shall be equipped with fire lanes and emergency vehicle access accommodations sufficient to satisfy the Windham Fire Department.
- 702.2.3 Retail establishments, restaurants, banks and service businesses which offer drivethrough facilities shall be equipped with a designated paved drive-through lane for each individual window or piece of equipment intended to serve drive-through patrons. Each drive-through lane shall be at least 11 feet in width, be properly striped and signed and be capable of accommodating the anticipated maximum vehicular queue length for the peak period of drive-through facility use. Each proposed drive-through lane shall be of a length greater than or equal to the anticipated maximum queue length and be designed in such a manner to accommodate the same without impeding vehicular circulation or interfering with access to and from parking spaces situated beyond the drive-through facility. In the case of any application for non-residential site plan approval involving a building or facility which intends to offer drive-through facilities for public use. the applicant shall submit a traffic impact assessment having a scope of study which includes, but is not limited to a queuing analysis for the purposes of estimating maximum vehicular queue length to be associated with the anticipated peak period of drive-through facility use.
- Pedestrian access to all structures and associated facilities shall be provided via paved walkways constructed in a manner consistent with the requirements of the Americans with Disabilities Act (ADA).

703 Parking Requirements

- **703.1** General Parking Requirements
 - Any site or structure approved under these Regulations shall enjoy paved on-site parking accommodations conforming to the requirements of Section 703.
 - 703.1.2 Except for in the Village Center District and the Gateway Commercial District, all parking spaces and aisles, as well as site driveways, drive-through lanes, fire lanes, loading areas and other paved surfaces shall be situated not closer than 15 feet to a side or rear property line and not closer than 20 feet to a front property line. In the Village Center District and the Gateway Commercial District, see Appendix A-1. In instances where proposed paved surfaces are located on a parcel that abuts a residentially zoned parcel, said paved surfaces shall be screened from abutting residential properties by either:
 - 703.1.2.1 A continuous landscaped buffer area, having a width of not less than 10 feet, planted with evergreen trees having a planting height of not less than 4 feet and anticipated height of not less than 6 feet within three years of planting. The entire length of said landscape buffer area shall be 80 percent or more opaque when viewed horizontally; or
 - **703.1.2.2** A vegetated landscaped buffer area, having a width of not less than 10-feet, upon which a six foot high solid fence is erected. Not less than 20 percent of the length of such fence face shall be planted with evergreen trees or shrubs having a planting height of not less than 3 feet.
 - 703.1.3 All parking facilities shall be designed and constructed in compliance with applicable requirements of the ADA.

- All sites containing 20 or more on-site parking spaces shall contain one or more islands of green space situated within the interior of the paved parking lot surface. The total area of all interior green spaces provided shall equal not less than five-percent of the cumulative area of all contiguous paved parking lot and driveway surfaces on the subject parcel. In order to qualify as interior green space for the purposes of satisfying this minimum interior green space requirement, an individual island of interior green space must measure at least 300 square feet in area. A minimum of one live deciduous or ornamental shade tree per 2,000 square feet of contiguous paved surface shall be planted within said interior green space(s). Where interior green spaces directly adjoin paved surfaces, they shall be protected from vehicular encroachment by the use of curbing.
- **703.1.5** Exterior parking facilities shall be configured such that not more than twenty contiguous parking spaces are placed in a single uninterrupted row.
- All public parking areas serving non-residential uses shall be illuminated to a minimum of a ½ foot candle during hours of operation.

703.2 Parking Density Requirements

All sites shall provide on-site parking at a rate greater than or equal to that specified below. Where the computation of required parking density results in a fractional number of spaces, the required number of spaces shall be rounded upwards to the nearest whole number (i.e. a computed density of 39.2 or 39.8 spaces results in a requirement for 40 spaces). In cases where a single site has or is to have multiple uses, parking requirements for each use shall be calculated in accordance with the requirements of this Section and the total number of required on-site parking spaces shall be equal to the sum of the combined minimum parking density requirements for each individual use.

The Planning Board, at its discretion, may authorize initial construction of fewer parking spaces than would otherwise be required under these Regulations provided:

- **703.2.1.1** The approved site plan identifies a suitable location and design of the full measure of parking spaces required under these Regulations;
- **703.2.1.2** The approved site plan identifies such areas as "reserved for future parking expansion"; and
- 703.2.1.3 A note is placed on the final site plan documenting any temporary relaxation in on-site parking requirements permitted by the Planning Board and acknowledging that the applicant, its heirs, successors or assigns agrees to construct additional parking spaces within those areas identified as "reserved for future parking expansion" within six months of receipt of written notice from the Planning Board to do so and further acknowledging that failure to comply with such written notice may result in a full or partial revocation of the certificate of occupancy for the facility served by said parking facility.
- 703.2.2 Handicapped accessible spaces, in sufficient number to satisfy applicable requirements of the ADA, shall be provided.
- 703.2.3 Unless otherwise approved by the Planning Board, all on-site parking spaces required under these Regulations shall be situated on the same premises as the use or uses they are intended to serve.

- 703.2.4 Minimum parking density requirements by specific use are as follows:
 - **703.2.4.1** Single-Family, Two-Family & Multi-Family Residential Uses: 2 spaces per dwelling unit.
 - **703.2.4.2** Boarding/Rooming Houses: 1 space per guest room, plus 1 additional space per employee on the largest shift.
 - **703.2.4.3** Hotels, Motels & Other Lodging Facilities: 1.25 spaces per room, plus 1 space per employee on largest shift, plus 1 space per 4 seats of function or meeting room capacity if such accommodations are offered to those other than guests.
 - **703.2.4.4** Congregate Elderly & Assisted Living Facilities: 1 space per resident of licensed capacity, plus 1 additional space per employee on the largest shift.
 - **703.2.4.5** Commercial Kennels and Veterinary Hospitals: 1 space per 500 square feet of gross floor area, plus 1 space per employee on the largest shift.
 - **703.2.4.6** Manufacturing Facilities: 1 space per 500 square feet of gross floor
 - **703.2.4.7** Research & Development Facilities/Laboratories: 1 space per 500 square feet of gross floor area.
 - **703.2.4.8** Warehousing, Storage and Wholesale Sales and Distribution Facilities: 1 space per 500 square feet of gross floor area for first 5,000 square feet, plus 1 space per 1,000 square foot increment of additional gross floor area.
 - **703.2.4.9** Sale of Motor Vehicles, Heavy Equipment, Building Materials, Nursery Products, Garden Centers, Commercial Greenhouses and Similar Uses: 1 space per 500 square feet of interior gross floor area, plus 1 space per 3,000 square feet of exterior product display area.
 - **703.2.4.10** Retail Stores & Shops: 1 space per 250 square feet of gross floor area.
 - **703.2.4.11** Restaurants: 1 space per 3 seats of restaurant seating, plus 1 space per 2 seats in lounge area, plus 1 space per employee on largest shift.
 - **703.2.4.12** Restaurants (fast food with or without drive thru): 1 space per 4 seats, plus 1 space per employee on largest shift.
 - **703.2.4.13** Banks & Credit Unions: 1 space per 350 square feet of gross floor area, plus stacking for not less than 5 vehicles per drive-up window.
 - **703.2.4.14** Professional Offices: 1 space per 300 square feet of gross floor area.
 - **703.2.4.15** Medical/Healthcare Offices & Laboratories (out-patient services): 1 space per 200 square feet of gross floor area.
 - **703.2.4.16** General Office Space (as a support use to commercial, industrial or institutional uses): 1 space per 250 square feet of gross floor area.
 - **703.2.4.17** Hospitals: 2 spaces per bed, plus 1 space per 250 square feet of gross floor area.

- **703.2.4.18** Nursing Homes, Rehabilitation and Convalescent Centers providing 24 hour residential accommodations): 0.5 spaces per resident, plus 1 space per employee on the largest shift.
- **703.2.4.19** Churches, Funeral Homes, Theatres, Cinemas, Concert Halls & other Places of Assembly: 1 space per 3 seats.
- **703.2.4.20** Indoor Health, Fitness, Gymnasium & Recreational Facilities: 1 space per 200 square feet of gross floor area, plus 1 space per 4 seats of fixed spectator seating.
- **703.2.4.21** Child & Adult Day Care Facilities: 0.25 spaces per person based on licensed capacity, plus 1 space per employee.
- **703.2.4.22** Hairdressers/Barbers, Personal Service Providers, Dry-Cleaners/Laundries & Retail Repair Shops: 1 space per 250 square feet of gross floor area.
- **703.2.4.23** Motor Vehicle Repair Facilities: 4 spaces per service bay.
- **703.2.4.24** Gasoline/Motor Fuel Sales: 1 space per fueling position, plus 1 space per employee on the largest shift, plus 1 space per 250 square feet of gross floor area of retail space, plus 4 spaces per motor vehicle service bay.
- **703.2.4.25** Car Washes: 2 spaces per wash bay, plus stacking for not less than 5 vehicles per wash bay.
- **703.2.4.26** Public & Private Schools (Grades K thru 8): 4 spaces per classroom, plus 1 space per 4 seats of assembly area.
- 703.2.4.27 Public & Private High Schools (Grades 9 thru 12), Trade Schools, Colleges & Other Institutions Offering Instruction or Training to Non-Resident Students: 0.5 spaces per student (based on maximum student capacity) or faculty/staff member, plus 1 space per 4 seats of assembly area.
- **703.2.4.28** Fraternal/Social Clubs & Lodges: 1 space per 4 seats of assembly area.
- **703.2.4.29** Uses Not Listed: To be determined by Code Enforcement Administrator.

703.3 Dimensional Requirements

- **703.3.1** Standard parking spaces shall be a minimum of 9-feet in width and a minimum of 18-feet in length. Parallel parking spaces shall be a minimum of 9-feet in width and 22-feet in length.
- Handicapped accessible parking spaces shall conform to the dimensional requirements specified under the ADA with the exception that accessible spaces shall be 9 rather than 8 feet in width.
- **703.3.3** Parking aisles intended for two-way vehicular travel shall be a minimum of 24-feet wide. Parking aisles intended for one-way vehicular travel shall be a minimum of 20-feet wide.

703.4 Construction Requirements

- 703.4.1 All parking spaces shall be striped with white or yellow traffic paint (4 inch minimum line width).
- All handicapped accessible spaces shall be identified by pavement markings and signage specified under the ADA.
- 703.4.3 All parking surfaces, aisles and drives shall be paved with a minimum thickness of 3 inches of hot bituminous pavement comprised of a 2 inch thick binder course overlaid with a one inch wearing course.
- All parking pavement shall be placed over a prepared gravel surface consisting of a minimum thickness of 4 inches of compacted crushed gravel placed over a minimum thickness of 8 inches of compacted gravel.

704 Landscape and Buffering Requirements

704.1 General Requirements

- All plant materials required under this Section shall be standard nursery stock, installed in accordance with generally accepted horticultural standards and be regularly maintained after installation. All plant materials specified on any site plan approved by the Planning Board shall be annually inspected by the owner or owner's agent. Any required plant materials found to be dead or diseased shall be replaced in kind. Failure to complete this requirement may result in a violation of site plan approval.
- All areas disturbed by construction shall be loamed and seeded with grass or other approved vegetation. A minimum of six (6) inches of loam shall be installed with not less than one (1) pound of perennial grass seed per fifty (50) square yards of area. In general, establishment of turf shall be limited to those areas that may be regularly maintained as lawn. Ground covers, mulch or other suitable material shall be applied to areas not intended to be regularly maintained as lawn.
- 704.1.3 Except for in the Village Center District, a minimum of thirty-percent of the gross lot area utilized for any non-residential or multi-family development shall be reserved as green space. Areas reserved as green space may be vegetated with grass, landscape plantings, ground covers or native vegetation.

704.2 Landscape Standards

- A street tree strip, having a minimum width of 20 feet running parallel to the frontage of any property shall be provided. Within any street tree strip, a minimum of one indigenous shade tree (such as oak, maple, elm, ash, linden, etc.) having a minimum caliper of 2.5 inches and branching height of not less than 8 feet at the time of planting shall be provided for each 50 feet of street frontage. Street trees shall be planted not closer than 25 feet to one another, within a public right-of-way, closer than 20 feet from the edge of pavement of any driveway or public street, nor within 20 feet of the drip line of any overhead utility lines.
- 704.2.2 A minimum of one deciduous or ornamental tree, having a minimum caliper diameter of 2.5 inches, per 30 feet of building perimeter shall be planted within the developed portion of any site. Trees shall be located so as to maximize the aesthetic quality of the property.

- A minimum of one deciduous or evergreen shrub, with a minimum height and diameter of 18 inches, or a one gallon pot of perennial ornamental grass per required parking space shall be planted within the developed portion of any site. Shrubs and/or ornamental grasses shall be located so as to maximize the aesthetic quality of the site.
- 704.2.4 In order to promote the preservation of mature specimen trees as part of the design and construction of new sites, healthy deciduous trees having a diameter of at least 8 inches at breast height may be preserved and used to fulfill the minimum tree planting requirements of this Section.

704.3 Screening of Unsightly Site Features

- 704.3.1 General screening requirements. Refuse storage areas, stockpiled materials, tractor trailers used for storage and other unsightly materials and objects situated on any site subject to review and approval under these regulations, shall be located so as to be out of view from abutting properties and public streets to the extent possible. In cases where such positioning is not possible, those items shall be effectively screened. A minimum screening shall be achieved by use of landscape plantings, fencing or enclosures of a height at least as tall as the item or items to be screened.
- **704.3.2** Screening requirements for loading and receiving areas. Loading docks and receiving areas shall be situated so as to be out of view from abutting properties and public streets where possible. Where such provisions are not possible, the applicant shall propose a method of screening and buffering acceptable to the Planning Board.

705 Design & Construction Standards for Drainage and Stormwater Management

- **705.1** Analysis and Design of Improvements:
 - All analysis and corresponding calculations prepared and submitted for the purposes of demonstrating fulfillment of specific requirements of these Regulations shall be prepared and sealed by a Licensed Professional Engineer. For the purposes of these Regulations, the applicable minimum standard for stormwater analysis and design shall be identical to requirements established by the New Hampshire Department of Environmental Services, under Chapter ENV-Wq 1500 of the New Hampshire Code of Administrative Rules, whether or not an Alteration of Terrain Permit is required pursuant to the authority of those Rules. To the extent applicable, all drainage and stormwater management facilities and infrastructure shall be designed so as to comply with these same Rules.
 - Design Calculations corresponding to the 10, 25 and 50 year return frequency design storm events shall be prepared and incorporated into a Stormwater Management Report submitted as part of any Site Plan Review application.

For the purposes of these Regulations, the design engineer shall rely upon calculations performed for the 10 year return frequency design storm in the comparison and pre and post-development peak stormwater discharge volumes to downstream and abutting properties and in the design of stormwater treatment accommodations.

A 25 year return frequency design storm shall be used in the design of all storm sewers and culverts.

- All culverts shall be checked for the 50 year return frequency design storm event and be up-sized if and when necessary to ensure such culverts remain functional throughout a storm of that intensity. All bridges shall be designed for the 50 year return frequency design storm.
- 705.1.3 The peak stormwater discharge volume tributary to any downstream privately or publicly owned property or street, for the 10 year return frequency design storm, shall not be increased as a result of planned development unless it can be demonstrated, to the satisfaction of the Planning Board, that no adverse impact to such properties will result, or appropriate flowage easements have been secured.
- 705.1.4 Minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality.
- Maintain or reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety or cause excessive municipal expenditures.
- **705.2** Design and Construction Standards for Stormwater Management Improvements:
 - All culverts, storm drains, drainage structures and related improvements furnished and installed shall conform to applicable provisions of <u>Standard Specifications for Road and Bridge Construction</u> (latest edition), as published and amended by the New Hampshire Department of Transportation.
 - All on-site culverts, storm drains and driveway culverts shall have a minimum diameter of 12 inches and be constructed of either reinforced concrete or high-density polyethylene. In the case of segments of culvert or storm drain to be situated within a public right-of-way, minimum pipe diameter and material requirements shall conform to Windham Highway Department or New Hampshire Department of Transportation standards as applicable.
 - A minimum of three (3) feet of soil cover shall be maintained over all culverts and storm drains situated beneath pavement.
 - Concrete or mortar-rubble masonry headwalls shall be furnished and installed on the inlet ends of all culverts of any diameter. Similar headwalls shall be furnished and installed on the discharge ends of all culverts 24 inches or greater in diameter. Flared end-sections may be installed in lieu of headwalls on the discharge end of culverts and storm drains having a diameter of less than 24 inches. Appropriate outlet protection shall be provided at all stormwater discharge points.
 - 705.2.5 Stormwater flow velocities for all ditches, stormwater conveyance channels and swales shall be checked by the design engineer. Suitable surface protection shall be provided within all ditches, channels and swales anticipated to have a flow velocity of more than 2.5 feet-per-second during the 10 year return frequency design storm.
 - 705.2.6 In instances where stormwater detention ponds, retention basins, or infiltration basins are planned, such facilities shall be designed and constructed in accordance with recommendations contained in a publication entitled Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire, published by the NHDES.

All stormwater treatment accommodations shall be designed and constructed in accordance with recommendations contained in a publication entitled <u>Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire</u>, published by the NHDES.

706 Design and Construction Standards for Utilities

- **706.1** Subsurface Sewage Disposal (Septic) Systems: Design and construction of on-site subsurface sewage disposal systems shall conform to applicable requirements of Town of Windham Regulations Governing Sewage or Waste Disposal Systems and the New Hampshire Code of Administrative Rules, as amended.
- **706.2** Water Supply Systems: Design and construction of on-site water supply systems shall conform to applicable requirements of Town of Windham Water Supply Regulations and the New Hampshire Code of Administrative Rules, as amended.
- **706.3** Other Utilities: All proposed utilities (electric, telephone, cable T.V., etc.) shall be installed underground in accordance with the specifications of each individual utility provider and applicable code.

707 Special Flood Hazard Areas

- **707.1** All Site Plan proposals governed by these regulations having lands identified as Special Flood Hazard Areas in the "Flood Insurance Study for the County of Rockingham, NH" together with the associated Flood Insurance Rate Maps of the Town of Windham shall meet the following requirements:
 - **707.1.1** The Site Plan, including utilities and drainage shall be designed to be consistent with the need to minimize flood damage and provide adequate drainage.
 - **707.1.2** Site Plan shall include Base Flood Elevation (BFE) data within such proposals i.e. floodplain boundary and base flood elevation.
 - **707.1.3** The Planning Board shall review the proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
 - **707.1.4** The Planning Board shall require the applicant to submit sufficient (construction drawings, grading and land treatment plans) so as to determine that:
 - i. all such proposals are consistent with the need to minimize flood damage;
 - ii. all public utilities and facilities, such as sewer, gas, electrical, and waste water systems are located and constructed to minimizes or eliminate flood damage; and,
 - iii. adequate drainage is provided so as to reduce exposure to flood hazards.

708 Design Review Guidelines

708.1 The purpose of the Design Review Guidelines are to provide for harmonious and aesthetically pleasing development in keeping with the strong concern of the residents of this town that each development should be of high quality, as outlined in the Master Plan.

708.2 Applicability

- 708.2.1 Site Plan Applications in the Limited Industrial District, Rural District, Business Commercial A District, Business Commercial B District, and Residence Districts A, B and C are subject to Design Review Guidelines except, Open Space Residential Developments.
- **708.2.2** For those Site Plan Applications in the Neighborhood Business District, Gateway Commercial District, Village Center District, Market Square Overlay District and the Professional, Business and Technology District, the Design Regulations, as currently in effect, are applicable.

708.3 Objectives:

- **708.3.1** Encourage quality building design and architecture, which enhances the aesthetic character of the community.
- Insure that the landscaping, signs and lighting are in harmony with the design, layout and location of the building and with other features to be developed within the site.
- **708.3.3** Allow a diversity of building designs and architectural styles.
- **708.3.4** Avoid monotonous and bland building appearances.
- **708.3.5** Minimize conflicts between residential and commercial uses.
- **708.3.6** Encourage harmonious design where there are existing buildings or developments having desirable characteristics.
- **708.3.7** Protect any historic buildings or resources that are affected by the development or remodeling for commercial or industrial use.
- **708.3.8** Encourage through landscaping and design guidelines the development of commercial areas that preserve the rural ambience of our community.

708.4 Factors for Evaluation:

- 708.4.1 Orientation and Building Location: The development of the site must address various elements in providing a design solution for a given building project. The building orientation, setback, alignment with the street and relative spacing with other structures will be considered in the overall design. The reuse of desirable structures and landscape features is encouraged.
- 708.4.2 Drainage: The developer should plan land development that responds to the surface flow of water and is in harmony with the existing site contours.
- Visual Continuity: Where there are existing buildings or developments that have special characteristics, design significance or which currently meet the goals of the design review guidelines, the site development should blend with the neighboring properties. This may be accomplished by utilizing similar architectural elements, materials, fences, tree placements, plantings and walkways. This will give a feeling of visual continuity to the overall area. This is especially important where the proposed commercial development is in proximity to historic structures or resources.

708.5 Landscaping:

- Landscaping materials shall be of a quality that will enhance the environment and serve as a functional part of the development. Trees should provide shade and have interesting character and color as they grow. Shrubs or ground cover should also include textures and colors while providing screening in required areas and highlighting the architecture of the development. The use of some evergreen materials is recommended as an all-season landscaping effect. The retention of any healthy existing vegetation is encouraged.
- Landscaping is an integral part of the proposed development. Site plans and elevations should illustrate how landscaping will tie in with other architectural features of the proposed development. Plantings should be used to identify major entryways to sites, screen service and storage areas and free standing sign poles, and break up long building walls.
- **708.5.3** Screening and buffers for different building functions shall be in harmony with the building form and colors. A combination of landscaping and decorative fencing or berming may be required to provide noise and visual barriers for adjacent residential uses.
- **708.6** Building Design and Materials:
 - **708.6.1** Architectural Features and Materials
 - 708.6.1.1 Long unbroken expanses of walls should be avoided. The building facade should have divisions such as building jogs, pilasters, or other architectural detailing, as well as changes in surface materials, colors, textures and rooflines to create the desired effect. Ground floor facades that face public streets should incorporate arcades, display windows, interesting entry areas, awnings and other such design features. All facades of the building that are visible from public streets and highways should feature characteristics similar to the front facade.
 - **708.6.1.2** Use of features and details such as covered porches, awnings, columns; towers, decks, arches and courtyard areas are encouraged to create interesting buildings and public spaces. These details should be in proportion with the building.
 - **708.6.1.3** Long expanses of roofline should be avoided through the use of gables, dormers, chimneys, cupolas, towers and changes in the ridgeline.
 - **708.6.1.4** The development should create a sense of entry onto the site and into major businesses within the site through facade treatment, landscaping, signage and lighting.
 - **708.6.1.5** Limit the exposure of foundation walls.
 - **708.6.1.6** Rooftop and ground level mechanical equipment used in conjunction with the building should be screened from public view. Areas for outdoor storage, truck parking, trash collection, loading and other such uses should be screened from abutting properties and streets.

708.6.2 Materials and Colors

- **708.6.2.1** The exteriors of buildings should utilize materials appropriate for the character of the building and compatible with desirable features of adjacent structures.
- **708.6.2.2** Suggested, but not limited to, materials should contribute to the aesthetics of the project. Typical materials are as follows:
 - **708.6.2.2.1** Pitched Roofs: Copper or colored standing seam metal panels or asphalt, slate, fiberglass or fire-retardant wood shingles

708.6.2.2.2 Exterior Walls:

- Wood clapboards, shingles, shakes, board and batten, brick, granite, marble or stone (natural or finished), reinforced stucco or textured masonry;
- Unclad masonry block, or corrugated metal siding may be used when not visible from public parking lots or adjacent public streets and highways.

708.6.2.2.3 Windows:

- Butt joint or ribbon glass;
- Multi-paned windows and groupings;
- Etched, beveled, sandblasted or stained glass.

708.6.2.2.4 Trim

- Wood, anodized aluminum; (colored or natural), metal with baked enamel finish, masonry or vinyl accent strips.
- Neon tubing or neon replica lighting shall not be encouraged as an acceptable feature for building trim or accent areas.
- 708.6.2.2.5 Colors used within the development should compliment and emphasize the overall design. Colors that are disharmonious with other colors used on the building or found on adjacent structures should be avoided. Paint colors should relate to natural materials found on the building such as brick, terra cotta, stone or wood. Contrasting colors, which accent architectural details and entrances are encouraged.
- **708.6.2.3** Samples of proposed building material and colors are to be provided with the application

708.6.3 Signs

708.6.3.1 Signs should be visible and legible through the use of appropriate details and proper locations.

- **708.6.3.2** Scale and Proportion: Every sign should be an integral, subordinate element within the overall building and site design. The scale and proportion of the signage shall not overpower the building or obscure the buildings architectural features.
- **708.6.3.3** Materials: Sign materials should harmonize with the building's design. A limited number of colors should be used.
- **708.6.3.4** Coordination: All signs within the building complex should be coordinated by using similar materials, letter styles, colors and overall sign sizes to ensure sign continuity and uniform appearance throughout the development.
- **708.6.3.5** Freestanding signs: All freestanding signs should be in an appropriate landscaped setting with uniform designs and setbacks.

708.7 Utilities and Outdoor Lighting

- **708.7.1** Pole mounted transformers should be moved to ground mounted pad installations where possible.
- 708.7.2 The coordinated style of the parking and pedestrian light fixtures should be compatible with the building lighting, which will allow for a consistent appearance for the project.

708.8 Historic Buildings

Any historic buildings/structures should attempt to be incorporated into any new proposed developments, where feasible, and new buildings should incorporate architectural elements that compliment the historic building design. Development that occurs adjacent to existing historic buildings/structures should be designed to complement them in terms of style, scale, and material.

709 Village Center District

The intent of the following standards is to provide additional criteria for development within the Village Center District.

709.1 Land Use Mix

- Fach proposal shall demonstrate how their site plan will be consistent with the Village Center District's overall recommended mix of land uses, as specified in the purpose of the District under Section 612 of the Zoning Ordinance.
- Multiple land owners/developers are encouraged to cooperate to allow a land use mix to be shared or interspersed between two or more separate areas. For example, one developer could contract with an adjacent parcel to develop residential while a second developer could bring a commercial use to the adjacent parcels.

709.2 Village Center Phasing Plan

The Village Center District will only be achieved through the coordination and the cooperation of multiple stakeholders including developers, landowners, applicants, municipality and citizens. Each proposal that comes before the Planning Board needs to demonstrate how their plan will bring together previous and future phases within the District.

SECTION 800 - WAIVER PROCESS

- The applicant may request that the Planning Board waive any of the requirements contained within this document. Requests for waivers shall be submitted in writing, specifying the Section number the justification for the request, and shall be included with the application submission.
- The Planning Board may permit waiver requests to be submitted in writing during the approval process, at their discretion.
- 803 The Board shall vote to grant or deny the applicant's request for a waiver from a specific section of these Regulations at any point during the Change of Use/Minor Site Plan or Major Final Site Plan application process.
- The basis for any waiver granted by the Planning Board shall be recorded in the minutes of the Board. The Planning Board may only grant a waiver if the Board finds, by majority vote, that:
 - 804.1 Strict conformity would pose an unnecessary hardship to the applicant and the granting of the waiver would not be contrary to the spirit and intent of the regulations; or
 - **804.2** Specific circumstances relative to the site plan, or conditions of the land in such site plan, indicate that the waiver will properly carry out the spirit and intent of the regulations; or
 - **804.3** Granting a waiver will allow for the preservation of historic or culturally significant features and/or structures on the site in which strict conformance to the regulations make it not reasonably possible; or
 - **804.4** Granting a waiver will allow for the interconnection (presently or in the future) to an abutting parcel(s) for parking lots, driveways, roads, sidewalks and/or access isles in which strict conformance to the regulations would make such interconnection not reasonably possible due to physical or legal impediments.

SECTION 900 - DEVELOPMENT OF REGIONAL IMPACT PROCESS

901 Determination of Regional Impact

- **901.1** In accordance with RSA 36:56, the Planning Board shall make a determination as to whether the development application, if approved, reasonably could be construed as having the potential for regional impact. Doubt concerning regional impact shall be resolved in a determination that the development has a potential regional impact.
- **901.2** In determining whether a project has regional impact, the Planning Board may consider, but is not limited to the consideration of, such factors as: the number of dwelling units, the proximity to the border of a neighboring community, transportation networks, and anticipated environmental impacts.
- 901.3 This determination will be made during the Preliminary Major Site Plan Application.

902 Procedures for Development of Regional Impact

902.1 Upon determination that a proposed development has a potential regional impact, the Planning Board shall afford the Regional Planning Commission and the affected communities the status of abutters, as defined in RSA 672:3, for the limited purposes of providing notice and giving testimony.

- **902.2** The Planning Board shall provide to the Regional Planning Commission and the affected communities the following notifications:
 - 902.2.1 Within 5 business days of the Planning Board reaching a decision that the development has the potential for regional impact, the Community Development Department shall notify the Regional Planning Commission and the affected municipalities by mail that the determination of regional impact was made.
 - 902.2.2 At least 14 days prior to the public hearing for the development of regional impact, the Community Development Department shall notify, via certified mail, the Regional Planning Commission and the affected municipalities of the date, time and place of the hearing and their right to testify concerning the development.

SECTION 1000 - POST APPROVAL PROCEDURES

1001 General Requirements

- **1001.1** No building or site construction, including land clearing, shall commence, nor shall a building permit be issued for such construction, unless and until a site plan has received final approval from the Planning Board and all conditions of approval precedent to signature of the final site plan have been satisfied.
- **1001.2** Prior to issuance of a building permit for the construction of any proposed building or structure, the Building Inspector shall:
 - 1001.2.1 Be satisfied reliable and safe vehicular access to such planned building or structure exists for the accommodation of both construction traffic and emergency response vehicles:
 - **1001.2.2** Ensure that all erosion control and measures listed on the site plan are in place; and
 - 1001.2.3 A temporary mud tracking bed (construction entrance) shall be put in place and maintained during the entire construction period to prevent tracking or flowing of sediment onto a paved right-of-way.
- **1001.3** Wood waste and construction debris shall not be buried on site.
- **1001.4** Burial of stumps on site is discouraged. However, if stumps are buried on site during land clearing operations, the stump burial areas shall be 75 feet from all existing or proposed drinking water supplies, 25 feet from all property lines, four feet above seasonal high water table and are recommended to be buried outside any proposed lawn areas. The stump burial sites shall be located on a certified plot plan by a surveyor at the same time as the foundation and wells.
- 1001.5 No certificate of occupancy shall be issued for any structure, building or site unless and until all improvements specified on an approved site plan have been fully and satisfactorily completed to the satisfaction of the Community Development Department. However, in certain instances and for good cause and reason, the Community Development Department may issue a temporary certificate of occupancy provided the owner provides a performance guarantee, in an amount and form acceptable to the Town, to serve as a financial guarantee for timely and successful completion of those site improvements requiring installation, completion or correction.
- **1001.6** Upon issuance of a certificate of occupancy for any structure, building or site permitted under these Regulations, the property owner, his/her heirs, successors or assigns shall provide for timely and proper maintenance of the property to the extent required in order to protect,

preserve and maintain the functionality and appearance of those improvements approved by the Planning Board. In the event a landowner fails to fulfill this requirement, the Town of Windham may compel said landowner to properly restore and maintain the premises in a manner consistent with the provisions of the approved site plan and these Regulations through any and all remedies available under New Hampshire law.

1002 Performance Guarantee Requirements and Procedures

- **1002.1** Pursuant to RSA 674:44, III(d) the Planning Board may stipulate, as a precedent condition of approval, that a performance guarantee, in an amount and form acceptable to the Town, be received prior to signature of the final site plan. Such performance guarantee shall serve as a financial surety for timely and successful completion of those portions of site improvements specified on an approved site plan situated in a public right-of-way, or in the judgment of the Planning Board, if are not properly completed in a proper and timely manner have the potential to cause damage to public or private property situated beyond the boundaries of the site.
- **1002.2** The Town shall receive a performance bond, irrevocable letter of credit, cash, or other form of surety it may deem acceptable. In all instances the form of the surety instrument provided shall:
 - a) Be acceptable to the Community Development Department;
 - b) Explicitly specify all applicable terms, conditions and duration of said surety;
 - c) Include an "automatic call" provision; and
 - d) Acknowledge that the surety shall neither lapse nor be terminated until released in writing by the Town of Windham.
- **1002.3** In the event improvements for which a performance guarantee has been given remain incomplete or are found to have been completed in an unacceptable manner, the Town of Windham shall enjoy the right to "call" the performance guarantee and utilize the proceeds of the same to cause any remaining improvements to be properly completed or repaired in accordance with the approved site plan.
- 1002.4 As site improvements for which a performance guarantee has been given are completed, the Board of Selectmen may, upon receipt of written request from the owner/applicant, vote to release all or any portion of said performance guarantee. However, in no case shall the value of any performance guarantee, which may continue to be held by the Town of Windham, represent a sum less than 110 percent of the anticipated cost of completion or correction of any remaining work to be guaranteed by such surety. Only upon full and final completion of all work for which a performance guarantee has been given shall the Board of Selectmen vote to release said surety in full.

1003 Inspection Requirements and Procedures

1003.1 Prior to commencement of construction, the owner/applicant or his/her representative shall contact the Community Development Department and request that a preconstruction conference be scheduled. Upon receipt of each such request, the Community Development Department shall promptly schedule a preconstruction conference which shall be attended by the owner or owner's representative, the owner's contractor(s) and those municipal officials invited by the Community Development Department. At the time of the conference, a Community Development Department representative shall review applicable Town construction requirements and procedures with attendees and confirm that all items prerequisite to commencement of construction are in place.

- 1003.2 During the construction period, the Community Development Department shall serve as the Planning Board's representative observing and reporting on the progression of the work. The Community Development Department may require a landowner to reimburse the Town for reasonable costs associated with the involvement of consultants in providing construction monitoring and inspection services. In the event the owner fails to reimburse the Town for the cost of such services in a timely manner, the Community Development Department may issue a stop work order which shall not be withdrawn unless and until the owner has made such reimbursements. In the event an owner fails to reimburse the Town for such costs, the Board of Selectmen may call upon any performance guarantee, which may have been given by the owner as a condition of site plan approval, as a remedy for reimbursement.
- **1003.3** If during construction, changes specified on the approved site plan are contemplated, the owner shall notify the Community Development Department in advance of proceeding with the same. Upon receipt of a request for a change, the Community Development Department shall make a determination as to whether or not the requested change represents a significant change in the approved plans and specifications.
 - 1003.3.1 In the event the Community Development Department makes the determination that a requested change is significant, the owner shall not proceed to make such change without the approval of the Planning Board.
 - 1003.3.2 In the event the Community Development Department makes the determination that the requested change represents a minor field change which will not adversely affect the outcome of the work or adversely affect an abutting property and will not cause a departure from the requirements of the approved site plan or these Regulations, the Community Development Department may approve such change and promptly record such approval in the project file.
 - **1003.3.3** If the requested change is a Planning Board Condition of Approval, the requested change will be determined to be significant and approval of the Planning Board will be required.
 - 1003.3.4 In instances where there is any uncertainty on the part of the Community Development Department as to whether or not a requested change is significant, the Community Development Department shall promptly defer decision on approval of the requested change to the Planning Board.
 - 1003.3.5 No changes or modifications in approved lighting plans may occur without the specific approval of the Planning Board.
 - 1003.3.6 In instances where the requested change is a requirement listed in the Design Review Regulations, the Design Review Subcommittee makes the determination if the requested change is significant or not.
 - **1003.3.6.1** If it is deemed a significant change, the owner shall not proceed to make such change without the approval of the Planning Board.
 - 1003.3.6.2 If it is deemed not to be a significant change, the Design Review Subcommittee may approve or disapprove such change and staff shall promptly record such decision in the project file.
- **1003.4** In the case of any site plan for which a change is approved and/or implemented during the course of construction, the applicant shall be required to submit acceptable as-built drawings of the completed construction to the Community Development Department prior to issuance of a Certificate of Occupancy.

SECTION 1100 - ACTIVE AND SUBSTANTIAL CONSTRUCTION

- 1101 Active and substantial development of site plans approved by the Planning Board shall commence within twelve (12) months and be substantially completed within twenty-four (24) months of the signing of the site plans by the Planning Board Chair,.
- 1102 If more time is needed, the applicant may request an extension of time, in writing and at least 30 days prior to the deadline passing, from the Planning Board for completion of the work in accordance with the approved site plan, and for good reason, the request may be granted.
- 1103 For purposes of these regulations, "active and substantial development" shall be defined as:
 - 1103.1 Construction of and/or installation of basic infrastructure to support the development (including all of the following: foundation walls and footings of proposed buildings; roadways, access ways, parking lots, etc. to a minimum of gravel base; and installation of underground conduit ready for connection to proposed buildings/structures) in accordance with the approved plans;
 - 1103.2 Construction and completion of drainage improvements to service the development (including all of the following: detention/retention basins, treatment swales, pipes, underdrain, catch basins, etc.) in accordance with the approved plans;
 - **1103.3** All erosion control measures (as specified on the approved plans) must be in place and maintained on the site;
 - **1103.4** Movement of earth, excavation, or logging of a site without completion of items 1103.1-1103.3, shall not be considered "active and substantial development."
 - **1103.5** Site Plans approved in phases shall be subject to this definition for the phase currently being developed.
- 1104 For purposes of these regulations, "substantial completion" shall be deemed to have occurred when a Certificate of Occupancy for all buildings shown on the approved site plan shall have been issued and all other on-site and/or off-site improvements have been determined to be in compliance with the approved site plan or satisfactory financial guarantees remain in place with the Town to insure completion of such improvements.

SECTION 1150 – CERTIFIED SITES PROGRAM

1151 Purpose

- The Town of Windham hereby agrees to participate in the Southern New Hampshire Planning Commission (SNHPC) Certified Site Program.
- This program provides an opportunity for property owner(s) and/or eligible applicant(s) to voluntarily obtain Certified Site recognition of specific eligible site(s) and/or building(s) as so designated within the Town of Windham.
- There are three levels of site certification under this program: Level I; Level II and Level III.
- All applications seeking site certification under this program must be endorsed by the Planning Board before submittal to the Southern New Hampshire Planning Commission (SNHPC) for final certification.
- A site becomes a "Certified Site" upon approval by the Southern New Hampshire Planning Commission's (SNHPC) "ReadySetGo!" Advisory Committee

Once certified, essential data and information about the site(s) and/or building(s) shall be posted by the SNHPC on active economic development websites and real estate databases designed to enhance the marketing and visibility of the site to national and international site selectors, real estate organizations and professionals, and companies and businesses seeking sites and buildings to utilize and/or develop.

1152 Applicability

- Sites and/or buildings eligible for certification under the Certified Site Program shall be open to eligible existing and/or proposed industrial, office and mixed-used developments on parcels of land greater than one acre in size within the Neighborhood Business District, Business Commercial A District, Business Commercial B District, Limited Industrial District, Village Center District, Professional, Business and Technology District, Market Square Overlay District and Gateway Commercial District within the Town of Windham.
- Sites and/or buildings seeking Level I certification under the Certified Site Program must complete a Preliminary Application per Section 603.1 of these Regulations.
- Sites and/or buildings seeking Level II certification under the Certified Site Program must obtain Final Site Plan approval, per Section 603.2 of these Regulations.
- Sites and/or buildings seeking Level III certification under the Certified Site Program must obtain Final Site Plan approval, per Section 603.2 of these Regulations and shall provide evidence to the Planning Board from applicable public utilities that the site and/or building is served by or has the availability to be directly connected to public water and/or sewer; telephone; electric, broadband fiber optics; or natural gas services at the parcel boundaries.
- Applicants must submit, at the time of application, written notification that they are looking to voluntary participate in the Certified Site Program and at what certification level.

1153 Approvals

- All Site Plans approvals by the Planning Board and accepted by SNHPC as a Certified Site shall be valid for a period of five years from the date of Planning Board approval.
- The term "active and substantial development or building" under RSA 674:39 for all Site Plans approved by the Planning Board and accepted by SNHPC as a Certified Site Program must include:
 - Planning Board receipt of written evidence that the applicant has invested a minimum of \$25,000 or more in engineering, architectural, construction and other approval soft costs associated with the plan;
 - 1153.2.2 Continued participation in and listing of the site/building in the SNHPC Certified Site Program; and
 - Annual written report and presentation to the Planning Board of the efforts made, status, prospects and schedule for marketing, sale, development and construction of the Certified Site.
- 1153.3 If and in the event an owner/applicant obtains Planning Board approval under the Certified Site Program, but the site is not certified by SNHPC, then the otherwise applicable regulation dealing with the length of approval and vesting of applications shall govern.

Notwithstanding the language in Section 1153.4, sites which have only obtained a Level I certification are not exempt from subsequent ordinance and regulation changes, unless a further application for full site plan approval is files within twelve (12) months, per RSA 676:12(VI).

SECTION 1200 - REVOCATION OF SITE PLAN

- 1201 The Planning Board may, in accordance with RSA 676:4-a, revoke, in whole or in part, site plan approval only under the following circumstances:
 - **1201.1** When the applicant or successor in interest to the applicant has performed work, erected a structure or structures, or established a use of land, which fails to conform to the statements, plans or specifications upon which the approval was based, or has materially violated any requirement or condition of such approval.
 - **1201.2** When the applicant or successor in interest to the applicant has failed to perform any condition of the approval within a reasonable time specified in the approval, or, if no such time is specified, within the time periods specified in RSA § 674:39.
 - **1201.3** When the time periods specified in RSA § 674:39 have elapsed without any vesting of rights as set forth therein, and the plat, plan or other approval no longer conforms to applicable ordinances or regulations.
 - **1201.4** When the applicant or successor in interest to the applicant has failed to provide for the continuation of adequate security as provided by RSA § 674:36, III(b) and § 674:44, III(d) until such time as the work secured thereby has been completed.
 - **1201.5** At the request of, or by agreement with, the applicant or the applicant's successor in interest.
- 1202 Prior to recording any revocation under this section, the planning board shall give notice, as provided by RSA 676:4, I(d), to the public, the applicant or the applicant's successor in interest, and all abutters and holders of conservation, preservation, or agricultural preservation restrictions, engineers, surveyors, or soil scientists.
 - **1202.1** The notice shall include the board's reasons for the revocation.
 - **1202.2** A hearing with notice as provided in RSA 676:4, I(d) shall be held at the request of any party receiving such notice, submitted within 30 days of receiving such notice, or if the planning board determines to hold a hearing.
- 1203 A declaration of revocation, dated and endorsed in writing by the planning board, and containing reference to the recording information for the plat, plan or other approval being revoked, shall be filed for recording with the register of deeds, no sooner than 30 days after written notification of the revocation is served on the applicant or the applicant's successor in interest, in person or by certified mail, or 30 days after any public hearing, whichever is later.
 - **1203.1** If only part of an approval is revoked, that portion of land subject to revocation shall be clearly identified in the declaration.
 - **1203.2** The declaration shall be recorded under the same name or names as was the original approval, as well as the names of subsequent owners, if any, of the land or part thereof subject to revocation, as identified by the municipality.
- A revocation under this section may be appealed pursuant to RSA 677:15. Nothing in this section shall affect the municipality's ability, either before or after such a revocation, to pursue other remedies or penalties as set forth in RSA 676:15-17.

SECTION 1300 - SEVERABILITY

The invalidity of any Section or provision of these regulations shall not have any effect upon the validity of any other Section or provision.

SECTION 1400 – AMENDMENTS

In accordance with RSA 675:6 the Planning Board, following a public hearing on the proposed amendment, may amend the site plan review regulations by an affirmative vote of the majority of its members. Notice of the time and place of the hearing shall be provided in accordance with RSA 675:7. No regulation amendments shall take effect until a copy of the document is certified by a majority of the Board and filed with the Town Clerk.

SECTION 1500 STORMWATER REGULATIONS

Section 1.1 Purpose and Goals.

The purpose of this Regulation is to control runoff and soil erosion and sedimentation resulting from site construction and development and to comply with US Environmental Protection Agency (EPA) Stormwater Management legislation. This Regulation covers areas including but not limited to: Urbanized Areas, Critical Areas and the area designated by the EPA as a Municipal Separate Storm Sewer System (MS4) area. Subdivisions and site plans shall include plans for managing Stormwater and controlling erosion and sedimentation as provided below. Any errors or omissions in these Regulations shall not exempt applications from complying with applicable State and Federal Statutes. In the event of conflicting requirements, pursuant to NH RSA 676:14 the stricter standard applies as stated in the Conflict and Severability and Conflicting Provisions sections of Windham's Ordinance and Regulations. The regulation shall become effective upon adoption by the Town of Windham Planning Board, in accordance with the provisions of RSA 147, 41:11, RSA 674:16 &17 and 674:36 & 44.

Section 1.2 Abbreviations/Definitions.

Best Management Practices (BMP). A proven or accepted structural, non-structural, or vegetative measure; the application of which reduces erosion sediment, or peak storm discharge, or improves the quality of Stormwater runoff.

Certified Soil Scientist. A person qualified in soil classification and mapping who is certified by the State of New Hampshire Board of Natural Scientists.

Critical Areas. Disturbed areas of any size within fifty (50) feet of any wetland; one hundred (100) feet of any Public Water Protection Wetland (as defined in Zoning Ordinance Section 4-11 Part C); disturbed areas exceeding two thousand (2,000) square feet in highly erodible soils; or, disturbed areas containing slope lengths exceeding twenty-five (25) feet on slopes greater than ten (10) percent.

Development. Any construction or land altering or grading activities other than for agricultural and silvicultural practices.

Disturbed Area. An area where the natural vegetation, including tree stumps, has been removed exposing the underlying soil, or vegetation has been covered.

Environmental Protection Agency (EPA). The Federal agency responsible for implementing Clean Water Act entities including the National Pollutant Discharge Elimination System (NPDES) program.

Erosion. The detachment and movement of soil or rock fragments by water, wind, ice, or gravity.

Highly Erodible Soils. Any soil with an erodibility class (K factor) greater than or equal to 0.43 in any layer as found in Table 3-1 of the "Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire."

- *NOI*. Notice of Intent as developed by the EPA.
- *NOT.* Notice of Termination as developed by the EPA.

NPDES. National Pollutant Discharge Elimination System, as developed by the EPA.

Project Area. The area within the subdivision or site plan boundaries plus any areas with associated off-site improvements.

Sediment. Solid Material, either mineral or organic, that is in suspension, is transported, or has been moved from its site of origin by erosion.

Stabilized. When the soil erosion rate approaches that of undisturbed soils. Soils which are disturbed will be considered stabilized when covered with a healthy, mature growth of grass, or good covering of straw mulch or other equivalent (seedless) mulch (at a T of not less than two [2] tons/acre). Mulch is only a temporary measure; ultimately, the site needs vegetation.

Stormwater Management Plan (SMP). A plan which outlines project features, proposed temporary and permanent (or post-construction) erosion control features, maintenance schedules and practices, and design basis used to establish both temporary and permanent design features. This plan is also known as a Stormwater Management and Erosion Control Plan.

Stormwater Pollution Prevention Plan (SWPPP). A plan required by the Environmental Protection Agency (EPA) that clearly describes appropriate control measures that include a description of all pollution control measures (i.e., BMPs) that will be implemented as part of the construction activity to control pollutants in Stormwater discharges and describes the interim and permanent stabilization practices for the site.

Stormwater Runoff. The water from precipitation that is not absorbed, evaporated, or otherwise stored within the contributing drainage area.

Stream. Areas of flowing water occurring for sufficient time to develop and maintain defined channels; but may not flow during dry portions of the year. Includes but is not limited to all perennial and intermittent streams located on U.S. Geological Survey Maps.

Urbanized Area (UA). As defined by the Census Bureau, these are automatically designated Municipal Separate Stormwater System (MS4) areas (by the EPA), see Map 1.

Section 1.3 Applicability.

- 1. The applicant shall design and submit a custom construction Stormwater management and erosion control plan to the Planning Director, for any tract of land being developed, redeveloped, or subdivided, where one or more of the following conditions are proposed:
 - a. A cumulative disturbed area exceeding twenty thousand (20,000) square feet.
 - b. Construction or reconstruction of a street or road.
 - c. A subdivision of more than three (3) building lots.
 - d. Disturbed critical areas (see Definitions).
- 2. The applicant shall design and submit a custom permanent Stormwater management and erosion control plan to the Planning Director, for any tract of land being developed, redeveloped, or subdivided as described Section 1.4. This submission shall occur: for a subdivision at the Final Review Phase, during the Non-Residential Site Review process, as part of the Building Permit review, depending upon the scale of the project proposed, or as directed by the Planning Director.

3. A waiver of this regulation may only be granted by the Planning Director or their designated agent. The applicant must provide evidence to support the request for waiver due to size or character of the project or the natural conditions of the site.

Section 1.4 Design Standards.

- 1. Temporary/Construction Stormwater Management Design. The following standards shall be applied in planning for Stormwater management and erosion control as related to construction: (Additionally, the Planning Board, by its adoption of this regulation, has incorporated the same by reference as a requirement of its subdivision and site plan regulations so that the plan and application contemplated hereunder should be presented to the Planning Board in connection with any such application as well. Such submission to the Planning Board shall be in addition to any requirements relating to Stormwater drainage system design that may also be contained in applicable subdivision and/or site plan regulations.)
 - a. All measures in the plan shall meet as a minimum the Best Management Practices set forth in the "New Hampshire Stormwater Manual", December 2008, as amended from time to time. Additional BMPs are available at the following locations:

https://www.des.nh.gov/organization/commissioner/pip/factsheets

https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater

- b. Whenever practical, natural vegetation shall be retained, protected, or supplemented. The stripping of vegetation shall be done in a manner that minimizes soil erosion.
- c. Appropriate erosion and sediment control measures shall be installed prior to soil disturbance.
- d. The area of disturbance shall be kept to a minimum. Disturbed areas remaining idle for more than thirty (30) days shall be stabilized.
- e. Measures shall be taken to control erosion within the project area. Sediment in runoff water shall be trapped and retained within the project area using approved measures. Wetland areas and surface waters shall be protected from sediment.
- f. Off-site surface water and runoff from undisturbed areas shall be diverted away from disturbed areas where feasible or carried without erosion through the project area. Integrity of downstream drainage systems shall be maintained.
- g. Measures shall be taken to control the post-development peak rate of runoff so that it does not exceed pre-development runoff for the two (2) year, twenty-four (24) hour storm event and for additional storm event frequencies as specified in the design criteria of the "New Hampshire Stormwater Manual."
- h. Priority should be given to preserving natural drainage systems including perennial and intermittent streams, wetlands, swales, and drainage ditches for conveyance of runoff leaving the project area.
- i. All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized within thirty (30) days unless conditions dictate otherwise.
- Naturally occurring streams, channels, and wetlands shall be used for conveyance of runoff leaving the project area only after appropriate sedimentation control measures have been employed.

- 2. Permanent Stormwater Management Design Criteria. In addition to criteria described below, the criteria in Section 1.12 shall be applied in planning for Stormwater management and erosion control as related to long-term management of municipal water quality:
 - a. Intentionally Omitted.
 - b. Intentionally Omitted.
 - c. Adjacent to the Wetlands Buffer (Any Size Disturbance).
 - i. Any new project adjacent to the wetlands buffer will require permanent water quality control measures.
 - ii. Projects involving redevelopment or expansion will be considered on a case-by-case basis.
 - d. Municipal Projects. All municipal projects will also consider inclusion of water quality control measures.
- 3. Permanent Stormwater Management Technical Design Criteria.
 - a. All measures in the plan shall meet as a minimum the Best Management Practices set forth in the "New Hampshire Stormwater Manual", as amended from time to time.
 - b. The design of proposed features must consider the following and conform with criteria outlined in Section 1.12:
 - i. Existing and proposed methods of handling Stormwater runoff so that there will be no increase in the amount of runoff that leaves the boundaries of the site. (The Planning Director may permit an increase in off-site Stormwater runoff on submission of a detailed downstream study and on the recommendation of the Town.)
 - ii. Intentionally Omitted.
 - iii. If the project will affect drainage flow to an existing roadway culvert, or if a detention or retention area is proposed, a minimum of a twenty-five (25) year storm shall be used to evaluate potential off-site effects. If a State owned or maintained culvert is affected by the development, State of New Hampshire Department of Transportation Guidelines shall be used for evaluation of the culvert.
 - iv. All temporary erosion and sediment control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil area resulting from the removal of temporary measures shall be permanently stabilized within thirty (30) days.
 - v. Velocities of less than ten (10) feet per second are required prior to entering a sedimentation swale. The maximum design velocity within the swale shall be 1.0 feet per second during passage of the 10-year storm.
 - vi. Flows less than ten (10) cubic feet per second are required prior to entering a sedimentation swale.
 - vii. All slopes equal to or steeper than 2:1 adjacent to a public right-of way must have special stabilization details provided with the submission.
 - viii. Velocities of ten (10) feet per second or less are desirable within a closed drainage system. Higher velocities may be allowed provided special design criteria have been used.

- ix. A minimum velocity of two feet per second (2 fps) is required within a closed drainage system.
- x. Proposed riprap within a public right-of-way shall be paced a minimum of twelve (12) inches deep.
- xi. Seasonal high-water table elevations must be accounted for in all BMP design criteria.
- xii. Drainage design and stormwater practices should follow the guidelines presented in the "New Hampshire Stormwater Manual", as published by the New Hampshire Department of Environmental Services, and additional guidelines published in the "Manual on Drainage Design for Highways", as published by the State of New Hampshire Department of Transportation.

Section 1.5 Application Submission.

- 1. The following minimum requirements apply to all projects, regardless of size. Additional requirements may be found in this Regulation and sections of the Site Plan Review and Subdivision Regulations.
 - a. Site drawing of existing and proposed conditions:
 - i. Locus map showing property boundaries.
 - ii. North arrow, scale, date.
 - iii. Property lines.
 - iv. Easements.
 - v. Structures, utilities, roads (including names), and other paved areas.
 - vi. Topographic contours.
 - vii. Critical areas.
 - viii. Surface water and wetlands, drainage patterns, and watershed boundaries.
 - ix. Vegetation.
 - b. Soils information for design purposes or for determining highly erodible soils shall be determined from a National Cooperative Soil Survey (NCSS) soil series map. A High Intensity Soil Map of the site, prepared in accordance with the Society of Soil Scientists of Northern New England (SSSNNE) Special Publication No. 1, can only be used for design purposes and not for determining highly erodible soils.
 - c. Temporary and permanent Stormwater management and erosion and sediment control BMPs.
 - d. Areas and timing of soil disturbance.
 - e. Schedule and procedures for the inspection and maintenance of all BMPs, during and after construction.
 - f. Narrative section including discussion of each measure, its purpose, construction sequence, and installation timing as they apply to the site.
 - g. If infiltration or exfiltration is proposed as part of the drainage solution, test pit information regarding estimated seasonal high water table shall be provided at the elevation of the proposed infiltrating or exfiltrating device.

- h. Calculations for the infiltration or exfiltration system. These calculations should account for frozen ground conditions, when the devices may not function at their optimal design.
- i. Any other specific study, calculation, or investigation as requested by the Town.
- j. The drainage plans and report(s) shall be certified by a Licensed Professional Engineer, registered in the State of New Hampshire.

Section 1.6 Completed Application Requirements.

- 1. The following shall be required in the final plan unless the project is deemed of sufficiently minimal impact to qualify for the minimum requirements specified in Section 1.4 (Design Standards) of this Regulation:
 - a. Construction Drawings/Supporting Documents.
 - b. Locus map showing property boundaries.
 - c. North arrow, scale, date.
 - d. Property lines.
 - e. Structures, roads, utilities, earth stockpiles, equipment storage, and plan for stump and debris removal.
 - f. Topographic contours at two (2) foot intervals.
 - g. Critical areas.
 - h. Within the project area and within two hundred (200) feet of project boundary surface waters, wetlands, and drainage patterns and watershed boundaries.
 - i. Vegetation.
 - j. Extent of one hundred (100) year flood plain boundaries if published or determined.
 - k. Soils information for design purposes from a National Cooperative Soil Survey (NCSS) soil series map or a High Intensity Soil Map of the site, prepared in accordance with SSSNNE Special Publication No. 1. Highly erodible soils shall be determined by soil series.
 - 1. Easements, existing and proposed.
 - m. Areas of soil disturbance, including calculation of square footage disturbed.
 - n. Areas of cut and fill, including existing and proposed elevations.
 - o. Locations of earth stockpiles.
 - p. Locations of equipment storage and staging.
 - q. Stump disposal.
 - r. Highlighted areas of poorly and very poorly drained soils.
 - s. Highlighted areas of poorly and/or very poorly drained soils proposed to be filled.
 - t. Locations, descriptions, details, and design calculations for all structural, non-structural, permanent, and temporary erosion and sedimentation control measures and BMPs.
 - u. Identification of all permanent control measures.
 - v. Identification of permanent snow storage areas.

- w. Identification of snow management measures during construction.
- x. Construction schedule.
- y. Earth movement schedule.
- z. Temporary (additional) detention and/or sediment control facilities may be designed to accommodate the storm most likely to occur during the anticipated duration of construction (e.g., construction duration of two years requires a two-year frequency storm evaluation).
- aa. A proposed schedule for the inspection and maintenance of all measures.
- bb. Identification of all permanent control measures and responsibility for continued maintenance.

2. Stormwater Management Report Section Including:

- a. Design calculations for all temporary and permanent structural control BMP measures.
- b. A proposed schedule and procedural details for the inspection and maintenance of all BMPs, during and after construction.
- c. Identification of all permanent control measures and responsibility for continued maintenance.
- d. Drainage report with calculations showing volume, peak discharge, and velocity of present and future runoff for the ten (10) year, twenty-four (24) hour storm event.
- e. Plans showing the entire drainage area affecting or being affected by the development of the site. Proposed lot boundaries and drainage areas shall clearly be shown on the plan.
- f. The direction of flow of runoff through the use of arrows shall clearly be shown on the plan.
- g. The location, elevation, and size of all existing and proposed catch basins, drywells, drainage ditches, swales, retention basins, and storm sewers shall be shown on the plan.
- h. When detention structures are planned to reduce future condition peak discharge, the soil cover complex method shall be used to compute the runoff volume and peak discharge for designing the structure. The design will conform to the criteria outlined for those types of structures given in the "Stormwater Management and Erosion and Sediment Control Handbook for Urban and Developing Areas in New Hampshire."
- i. Copies of pertinent State and Federal Permits.
- j. An example Stormwater Management Plan table of contents follows:
 - i. Project Overview.
 - ii. Owner.
 - iii. Address of development.
 - iv. Location of the site.
 - v. Description of receiving waters.
 - vi. Nature and purpose of the land disturbing activity.
 - vii. Limits of disturbance.
 - viii. Construction schedule.
 - ix. Existing conditions summary.
 - x. Define topography, drainage patterns, soils, ground cover, critical areas adjacent areas, upstream areas draining through site, existing development, existing

- Stormwater facilities, on- and off-site utilities, construction limitations, buffers, wetlands, streams, sensitive areas, and other pertinent features.
- xi. Include an existing conditions plan (drawing) showing the above existing conditions and labeled per the narrative above.
- xii. Off-site analysis.
- xiii. Describe the tributary area (include at least one-quarter (¼) mile downstream), drainage channels, conveyance systems, and downstream receiving waters.
- xiv. Review existing or potential problems resulting from the development including, but not limited to, sedimentation, erosion, water quality issues, chemical spills.
- xv. Demonstrate that development of the site will not affect the downstream systems negatively.
- xvi. Demonstrate adequate capacity of the downstream system to handle flow conditions after development.
- xvii. As applicable, include an off-site drainage plan (the plan may be part of the existing conditions plan).
- xviii. Appendix (include copies of all tables, graphs, and charts, test pit and percolation test data used in any of the above calculations).

Section 1.7 Responsibility for Installation/Construction.

- 1. The applicant and the applicant's engineer (or technical representative) shall schedule and attend a mandatory preconstruction meeting with the Town at least two (2) weeks prior to commencement of construction. Two (2) copies of the SWPPP (if required), SMP, associated construction documents, and Notice of Intent (if required) must be provided at that time. All documents must bear the seal and signature of the registered Professional Engineer preparing the documents. Prior to commencement of construction, the Planning Director will confirm that the documents submitted meet the conditions of plan approval. An appropriate notation will be made on the "official" construction set used by the Planning Director.
- 2. The Town reserves the right to prepare and request the applicant's acknowledgement of a preconstruction checklist.
- 3. The applicant shall bear final responsibility for the installation, construction, inspection, and disposition of all Stormwater management and erosion control measures required by the provisions of this Regulation.
- 4. The Planning Director shall require a bond or other security in an amount and with surety conditions satisfactory to provide for the actual construction and installation of such measures within a period specified by the Planning Director and expressed in the bond or the surety.
- 5. The Town may require the owner or his authorized agent to deposit in escrow with the Town an amount of money sufficient to cover the costs for inspection and any professional assistance required for compliance site monitoring.
- 6. Site development shall not begin before the Stormwater management and erosion control plan receives conditional approval from the Planning Director. Best Management Practices shall be installed as designed and scheduled as a condition of final approval of the plan.
- 7. Commercial and Industrial Development and/or Redevelopment.
 - a. The applicant, owner, and owner's legally designated representative (if any) shall all hold responsibility for implementing the Stormwater management and erosion control plan.

- 8. Residential Development and Redevelopment.
 - a. The applicant is responsible for implementing the Stormwater management and erosion control plan. There are two (2) ways for the applicant to be removed from the responsible party (in the Town's jurisdiction):
 - i. The applicant completes the project in a satisfactory manner and files a Notice of Termination (NOT) with the EPA in accordance with the terms of the Federal requirements and provides evidence of documentation that formally transfers ongoing maintenance responsibilities to a new property owner.
 - ii. The applicant passes legal responsibility of the plan to another competent party. In the case of a new subdivision where lots may be transferred to a different entity for construction of the buildings, it is the applicant's responsibility to ensure that the applicant has a legal basis to require compliance by the new entity.
- 9. Individual Homeowner Development.
 - a. Once the homeowner has taken control of a subdivided property, the homeowner bears responsibility for compliance with the approved Stormwater management and erosion control plan. If the homeowner is contracting building services to another person or entity, the homeowner may choose to pass legal responsibility of compliance to the contracted entity. If the responsibility is not passed, the homeowner remains the responsible party and must comply with the terms of the original plan.

Section 1.8 Plan Approval and Review.

- 1. The Planning Director shall indicate approval of the Stormwater management and erosion control plan, as filed, if it complies with the requirements and objectives of this regulation. If applicable, such approval shall be a component of subdivision or site plan approval, but shall not relieve the applicant of the need to comply with requirements relating to Stormwater drainage systems design that may also be contained in other applicable subdivision and/or site plan regulations.
- 2. Final approval shall be contingent upon collection of any required fees or escrow amounts related to technical review of any Stormwater management and erosion control plan prepared under this Regulation.

Section 1.9 Maintenance Inspection and Maintenance Security.

- 1. A narrative description of ongoing construction and operational maintenance requirements for water quality measures required by Stormwater management and erosion and sediment control plans after final Planning Director approval shall be recorded on the deed, and any accompanying development agreements or covenants, to the property on which such measures are located. The narrative shall be in the form of a typical site plan management, development agreement, or as otherwise set forth by the Planning Director. The description so prepared shall comply with the requirements of RSA 478:4-a, as detailed below:
 - a. The Registry of Deeds shall not accept a deed or instrument for filing and recording unless it recites the following information:
 - i. The latest mailing address of the grantees named in the deed or instrument;
 - ii. In the first sentence of the first description paragraph, the names of all municipalities in which the property is located;
 - iii. The name of each person signing the deed or instrument as a party to the transaction printed or typewritten under the signature.

- b. All documents shall be suitable for reproduction as determined by the Rockingham County Registry of Deeds, which shall provide document standards as amended and adopted by the New Hampshire registers of deeds. The standards and any amendments thereto shall include a statement of their effective date, and shall be posted in and distributed by all registries of deeds for at least sixty (60) days prior to such effective date.
- c. In the event of any changes in Registry procedure or requirements, RSA 478:4-a, shall supersede the above requirements, and the applicant shall fulfill those requirements.
- 2. There shall further be a copy of the maintenance requirements on site during construction activity. During the time of construction, a log and report must be submitted to the Town twice each month, and within forty-eight (48) hours of any storm event with greater than one (1) inch of rainfall. This report shall detail all inspections; any actions taken per the construction Stormwater management and erosion control plan, including the reasons for doing so, dates of action, and follow up action required. After construction, this copy of the maintenance requirements shall be given to a responsible party, either at the maintenance/management company, or in the Homeowners' Association. This party will be responsible for preparing a yearly log and report, to be submitted to the Town no later than the close of business on the last business day in January. This report shall contain all of the information required in the bi-weekly reports.
- 3. If the applicant, manager, or owner is unable to adequately provide the required maintenance activities, the Town may require additional escrow funding to be used by either the applicant or the Town solely to repair, replace, and/or maintain the required measures.
- 4. The Planning Director may require inspections to verify ongoing maintenance of water quality protection measures. Such inspections shall be performed by the Planning Director at reasonable times to the landowner. The applicant, manager, or owner shall bear the cost of these inspections, and shall pay in a manner acceptable to the Town.
- 5. If permission to inspect is denied by the landowner, the Planning Director shall secure an administrative inspection warrant from the district or superior court under RSA 595-B.

Section 1.10 Enforcement and Penalties.

- 1. The purpose of this article is to enact locally the administrative and enforcement procedures set forth in RSA Title LXIV, specifically RSA 676:15, 16, 17, 17-a and 17-b, of the existing planning and land use statutes.
- 2. RSA Title LXIV, (64), specifically RSA 676:15, 16, 17, 17-a and 17-b, authorizes the following penalties and remedies for enforcement of the provisions of this regulation:
 - a. Injunctive relief in accordance with RSA 676:15.
 - b. Fines and penalties in accordance with RSA 676:17.
 - c. Issuance of a cease and desist order in accordance with RSA 676:17-a.
 - d. Pleas by mail for local land use citations in accordance with RSA 676:17-b.
- 3. Any violation of the requirements of this Regulation shall be subject to enforcement by the Zoning Code enforcement officer for the Town of Windham, who shall be empowered to take any action authorized by the provisions of RSA Title LXIV, or any other applicable law or regulation.
- 4. Prior to taking any other action, the Town shall issue a Notice of Violation (see Section 4.2).

Section 1.11 Other Required Permits.

In addition to local approval, copies of the following permits shall be required if applicable:

- 1. RSA 483-B requires a permit from the New Hampshire Department of Environmental Services for "...any person proposing to significantly alter the characteristic of the terrain, in such a manner as to impede natural runoff or create an unnatural runoff ..." Regulations require this permit for any project involving more than 100,000 contiguous square feet of disturbance or if such activity occurs in or on the border of the surface waters of the state.
- 2. National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. A permit issued by the EPA or by the State under authority delegated pursuant to 33 USC, section 1342 (b) that authorizes the discharge of pollutants to waters of the United States.

For a cumulative disturbance of one (1) acre of land that EPA considers "construction activity," which includes, but is not limited to clearing, grading, excavation, and other activities that expose soil typically related to landscaping, demolition, and construction of structures and roads, a federal permit will be required. Consult EPA for specific rules. This EPA permit is in addition to any state or local permit required. To apply, the entity or individual responsible for construction site operations shall file a Notice of Intent (NOI) with the EPA postmarked at least 24 hours prior to work beginning. EPA will respond within two (2) weeks with a written permit, provided the NOI meets their criteria.

Section 1.12 Post-Construction Operation.

Purpose and Goals

1. Purpose and Goals. The purpose of post construction Stormwater management standards is to provide reasonable guidance for the regulation of Stormwater runoff to protect local natural resources from degradation and prevent adverse impacts to adjacent and downstream land, property, facilities, and infrastructure. These standards regulate discharges from Stormwater and runoff from land development projects and other construction activities to control and minimize increases in Stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with Stormwater runoff.

The goal of these standards is to establish minimum Stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public in the Town of Windham. This regulation seeks to meet that goal through the following objectives:

- a. Minimize increases in Stormwater runoff from any development to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels.
- b. Minimize increases in nonpoint source pollution caused by Stormwater runoff from development which would otherwise degrade local water quality.
- c. Minimize the total volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic condition to the maximum extent practicable as allowable by site conditions.
- d. Reduce Stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through Stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety or cause excessive municipal expenditures.
- e. Protect the quality of groundwater resources, surface water bodies and wetlands.

Minimum Thresholds for Applicability

- 1. The post-construction Stormwater management standards apply to any development or redevelopment project which are subject to Site Plan or Subdivision approval that disturbs more than 10,000 square feet or disturbs more than 5,000 square feet within 100 feet of a surface water body.
- 2. The Planning Board may grant a waiver from these regulations upon appropriate demonstration by the applicant as to why these regulations should not apply.
- 3. The following activities are considered exempt from these regulations:
 - a. Agricultural and forestry practices located outside wetlands and surface water setbacks and/or buffers.
 - b. Resurfacing and routine maintenance of roads and parking lots.
 - c. Interior and exterior building renovation that do not result in improvements that increase impervious area if capital cost of improvements is less than 30% of the appraised property value.
- 4. The Post-Construction Stormwater Management Standards apply to subdivisions that result in creation of a private road or a road intended for adoption as a public road. All Stormwater runoff generated from the proposed private or public roadway(s) and any other Stormwater runoff contributing to the roadway Stormwater management system(s) shall be managed and treated in full compliance with these standards.
- 5. For subdivisions comprising lots with frontage on existing private or public roadways, roadside drainage and any other Stormwater runoff from the new lots discharging to the roadside drainage system must be managed for: Stormwater runoff quantity/volume; and water quality treatment if Stormwater is discharged from the applicant's parcel(s).

Stormwater Management for New Development

- 1. All proposed Stormwater management practices and treatment systems shall meet the following performance standards.
 - a. Stormwater management and erosion and sediment control practices shall be located outside any specified buffer zones unless otherwise approved by the Planning Board. Alternatives to stream and wetland crossings that eliminate or minimize environmental impacts shall be considered whenever possible.
 - b. Low Impact Development (LID) site planning and design strategies shall be used to the maximum extent practicable (MEP) to reduce Stormwater runoff volumes, protect water quality, and maintain predevelopment site hydrology. Low Impact Development (LID) techniques with the goals of protecting water quality, maintaining predevelopment site hydrology. Low Impact Development (LID) techniques that preserve existing vegetation, reduce the development footprint, minimize, or disconnect impervious area, and use enhanced Stormwater BMPs (such as raingardens, bio retention systems, tree box filters, and similar Stormwater management landscaping techniques) shall be incorporated into landscaped areas. Capture and reuse of Stormwater is strongly encouraged. The applicant must document in writing why LID strategies are not appropriate when not used to manage Stormwater.

- c. All Stormwater treatment areas shall be planted with native plantings appropriate for the site conditions: trees, grasses, shrubs and/or other native plants in sufficient numbers and density to prevent soil erosion and to achieve the water quality treatment requirements of this section.
- d. Salt storage areas shall be fully covered with permanent or semi-permanent measures and loading/offloading areas shall be located and designed to not drain directly to receiving waters and maintained with good housekeeping measures in accordance with NH DES published guidance. Runoff from snow and salt storage areas shall enter treatment areas before being discharged to receiving waters or allowed to infiltrate into the groundwater. See NHDES published guidance fact sheets on road salt and water quality, and snow disposal at http://des.nh.gov/organization/commissioner/pip/factsheets/wmb/index.htm.
- e. Surface runoff shall be directed into appropriate Stormwater control measures designed for treatment and/or filtration to the maximum extent practicable and/or captured and reused onsite.
- f. All newly generated Stormwater from new development shall be treated on the development site. A development plan shall include provisions to retain natural predevelopment watershed areas on the site by using the natural flow patterns.
- g. Runoff from impervious surfaces shall be treated to achieve at least 80% removal of Total Suspended Solids and at least 50% removal of both total nitrogen and total phosphorus using appropriate treatment measures, as specified in the NH Stormwater Manual. Volumes 1 and 2, December 2008, as amended or other equivalent means. Where practical, the use of natural, vegetated filtration and/or infiltration practices or subsurface gravel wetlands for water quality treatment is preferred given its relatively high nitrogen removal efficiency. All new impervious area draining to surface waters impaired by nitrogen, phosphorus or nutrients shall be treated with Stormwater BMPs designed to optimize pollutant removal efficiencies based on design standards and performance data published by the UNH Stormwater Center and/or included in the latest version of the NH Stormwater Manual.
- h. Measures shall be taken to control the post-development peak runoff rate so that it does not exceed pre-development runoff rate. Drainage analyses shall include calculations comparing pre- and post-development Stormwater runoff rates (cubic feet/second) and volumes (cubic feet) for the 1-inch rainstorm and the 2-year, 10-year, 25-year, and 50-year 24-hour storm events. Similar measures shall be taken to control the post-development runoff volume to infiltrate the groundwater recharge volume (GRV) in accordance with NH DES Alteration of Terrain requirements. For sites where infiltration is limited or not practicable, the applicant must demonstrate that the project will not create or contribute to water quality impairment.
- i. The design of the Stormwater drainage systems shall provide for the disposal of Stormwater without flooding or functional impairment to streets, adjacent properties, downstream properties, soils, or vegetation.
- j. The design of the Stormwater management systems shall account for existing site hydrology, including flows originating offsite.
- k. Whenever practicable, native site vegetation shall be retained, protected, or supplemented. Any stripping of vegetation shall be done in a manner that minimizes soil erosion.

- 2. Submission Requirements for Stormwater Management Report and Plans.
 - a. All applications shall include a comprehensive Stormwater Management Plan (SMP). The SMP shall include a narrative description and an Existing Conditions Site Plan showing all pre-development impervious surfaces, buildings and structures; surface water bodies and wetlands; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers, locations of various hydrologic group soil types, mature vegetation, land topographic contours with minimum 2-foot intervals and spot grades where necessary for sites that are flat.
 - b. The SMP shall include a narrative description and a Proposed Conditions Site Plan showing all post-development proposed impervious surfaces, buildings and structures; temporary and permanent Stormwater management elements and best management practices (BMP), including BMP GIS coordinates and GIS files; important hydrologic features created or preserved the site; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers; proposed tree clearing and topographic contours with minimum 2-foot intervals. The plans shall provide calculations and identification of the total area of disturbance proposed on the site (and off site if applicable) and total area of new impervious surface created. A summary of the drainage analysis showing a comparison of the estimated peak flow and volumes for various design storms (see Table 1. Stormwater Infrastructure Design Criteria) at each of the outlet locations shall be included.
 - c. The SMP shall describe the general approach and strategies implemented, and the facts relied upon, to meet the goals of the standards and technical elements required by section 1.4.3.: The SMP shall include design plans and/or graphical sketches of all proposed LID practices.
 - d. The SMP shall include calculations of the change in impervious area, pollution loading and removal volumes for each best management practice, and GIS files containing the coordinates of all Stormwater infrastructure elements (e.g. catch basins, swales, detention/bio retention areas, piping).
 - e. The SMP shall include a description and a proposed Site Plan showing proposed erosion and sediment control measures, limits of disturbance, temporary and permanent soil stabilization measures in accordance with the NHDES Stormwater Manual Volume 3 (most recent version) as well as a construction site inspection plan including phased installation of best management practices and final inspection upon completion of construction.
 - f. The SMP shall include a long-term Stormwater management BMP inspection and maintenance plan that describes the responsible parties and contact information for the qualified individuals who will perform future BMP inspections. The inspection frequency, maintenance and reporting protocols shall be included.
 - g. The SMP shall describe and identify locations of any proposed deicing chemical and/or snow storage areas. SMP will describe how deicing chemical use will be minimized or used most efficiently.
 - h. In urbanized areas that are subject to the EPA MS4 Stormwater Permit and will drain to chloride-impaired waters, any new developments and redevelopment projects shall submit a description of measures that will be used to minimize salt usage, and track and report amounts applied using the UNH Technology Transfer Center online tool (http://www.roadsalt.unh.edu/Salt/) in accordance with Appendix H of the NH MS4 Permit.

- 3. General Performance Criteria for Stormwater Management Plans.
 - a. All applications shall apply site design practices to reduce the generation of Stormwater in the post-developed condition, reduce overall impervious surface coverage, seek opportunities to capture and reuse and minimize and discharge of Stormwater to the municipal Stormwater management system.
 - b. Water Quality Protection.
 - No Stormwater runoff generated from new development or redevelopment shall be discharged directly into a jurisdictional wetland or surface water body without adequate treatment.
 - ii. All developments shall provide adequate management of Stormwater runoff and prevent discharge of Stormwater runoff from creating or contributing to water quality impairment.
 - c. Onsite groundwater recharge rates shall be maintained by promoting infiltration through use of structural and non-structural methods. Capture and reuse of Stormwater runoff is encouraged in instances where groundwater recharge is limited by site conditions All Stormwater management practices shall be designed to convey Stormwater to allow for maximum groundwater recharge. This shall include, but not be limited to:
 - i. Maximizing flow paths from collection points to outflow points.
 - ii. Use of multiple best management practices.
 - iii. Retention of and discharge to fully vegetated areas.
 - iv. Maximizing use of infiltration practices.
 - v. Stormwater System Design Performance Standards.
 - d. Stormwater system design, performance standards and protection criteria shall be provided as prescribed in Table 1 below. Calculations shall include sizing of all structures and best management practices, including sizing of emergency overflow structures based on assessment of the 100-year 24-hour frequency storm discharge rate.
 - e. The sizing and design of Stormwater management practices shall utilize new precipitation data from the Northeast Region Climate Center (NRCC) or the most recent precipitation atlas published by the National Oceanic and Atmospheric Administration (NOAA) for the sizing and design of all Stormwater management practices. See the NRCC website at http://precip.eas.cornell.edu/.
 - f. All Stormwater management practices involving bio retention and vegetative cover as a key functional component must have a landscaping plan detailing both the type and quantities of plants and vegetation to be in used in the practice and how and who will manage and maintain this vegetation. The use of native plantings appropriate for site conditions is strongly encouraged for these types of Stormwater treatment areas. The landscape plan must be prepared by a licensed landscape architect, soil conservation district office, or another qualified professional.

4. Spill Prevention, Control and Countermeasure (SPCC) Plan.

Any existing or otherwise permitted use or activity having regulated substances in amounts greater than five gallons, shall submit to the local official such as Fire Chief, Emergency Response Official a SPCC plan for review and approval. The Plan will include the following elements:

- a. Disclosure statements describing the types, quantities, and storage locations of all regulated substances that will be part of the proposed use or activity.
- b. Owner and spill response manager's contact information.
- c. Location of all surface waters and drainage patterns.
- d. A narrative describing the spill prevention practices to be employed when normally using regulated substances.
- e. Containment controls, both structural and non-structural.
- f. Spill reporting procedures, including a list of municipal personnel or agencies that will be contacted to assist in containing the spill, and the amount of a spill requiring outside assistance and response.
- g. Name of a contractor available to assist in spill response, contaminant, and cleanup.
- h. The list of available clean-up equipment with instructions available for use on-site and the names of employees with adequate training to implement containment and clean up response.

Stormwater Management for Redevelopment

- 1. Redevelopment (as applicable to this Stormwater regulation) means:
 - a. Any construction, alteration, or improvement that disturbs existing impervious area (including demolition and removal of road/parking lot materials down to the erodible subbase) or expands existing impervious cover by any amount, where the existing land use is commercial, industrial, institutional, governmental, recreational, or multifamily residential.
 - b. Any redevelopment activity that results in improvements with no increase in impervious area shall be considered redevelopment activity under this regulation if capital cost of improvements is greater than 30% of the appraised property value.
 - c. Any new impervious area over portions of a site that are currently pervious.
 - d. The following activities are not considered redevelopment:
 - i. Interior and exterior building renovation that do not result in improvements that increase impervious area if capital cost of improvements is less than 30% of the appraised property value described in b, above.
 - ii. Resurfacing of an existing paved surface (e.g. parking lot, walkway, or roadway).
 - iii. Pavement excavation and patching that is incidental to the primary project purpose, such as replacement of a collapsed storm drain.
 - iv. Landscaping installation and maintenance.
- 2. Redevelopment applications shall comply with the requirements of the following sections: Submission Requirements for Stormwater Management Report and Plans, General Performance Criteria for Stormwater Management Plans, and Spill Prevention, Control and Countermeasure (SPCC) Plan.

- 3. For sites meeting the definition of a redevelopment project and having less than 60% existing impervious surface coverage, the Stormwater management requirements will be the same as other new development projects. The applicant must satisfactorily demonstrate that impervious area is minimized, and LID practices have been implemented on-site to the maximum extent practicable.
- 4. For sites meeting the definition of a redevelopment project and having more than 60% existing impervious surface area, Stormwater shall be managed for water quality in accordance with one or more of the following techniques, listed in order of preference:
 - a. Implement measures onsite that result in disconnection or treatment of 100% of the additional proposed impervious surface area and at least 30% of the existing impervious area and pavement areas, preferably using filtration and/or infiltration practices.
 - b. If resulting in greater overall water quality improvement on the site, implement LID practices to the maximum extent practicable to provide treatment of runoff generated from at least 60% of the entire developed site area.
- 5. Runoff from impervious surfaces shall be treated to achieve at least 80% removal of Total Suspended Solids and at least 50% removal of both total nitrogen and total phosphorus using appropriate treatment measures, as specified in the NH Stormwater Manual. Volumes 1 and 2, December 2008, as amended or other equivalent means. All new impervious area draining to surface waters impaired by nitrogen, phosphorus or nutrients shall be treated with Stormwater BMPs designed to optimize pollutant removal efficiencies based on design standards and performance data published by the UNH Stormwater Center and/or included in the latest version of the NH Stormwater Manual.

Option to Allow for Off-Site Mitigation:

- 1. In cases where the applicant demonstrates, to the satisfaction of the planning board, that on-site treatment has been implemented to the maximum extent possible or is not feasible, off-site mitigation will be an acceptable alternative if implemented within the same sub watershed, within the project's drainage area or within the drainage area of the receiving water body. To comply with local watershed objectives the mitigation site would be preferably situated in the same sub watershed as the development and impact/benefit the same receiving water.
- 2. Off-site mitigation shall be equivalent to no less than the total area of impervious cover NOT treated on-site. Treatment of the impervious area shall comply with all standards of this regulation.
- 3. An approved off-site location must be identified, the specific management measures identified, and if not owned by the applicant, with a written agreement with the property owner(s) and an implementation schedule developed in accordance with planning board review. The applicant must also demonstrate that there is no downstream drainage or flooding impacts that would result from not providing on-site management for large storm events.

Stormwater Management Plan, Construction and Post-Construction Site Inspections

1. The applicant shall provide that all Stormwater management and treatment practices have an operation and maintenance plan in place and agreement to ensure the system will continue to function as designed. This agreement will include all maintenance easements required to access and inspect the Stormwater treatment practices, and to perform routine inspections and maintenance as necessary to ensure proper functioning of the Stormwater system. The operations and maintenance plan shall specify the parties responsible for the proper maintenance of all Stormwater treatment practices. The operations and maintenance plan shall be provided to the Planning Board as part of the application prior to issuance of any local permits for land disturbance and construction activities. The Operation and Maintenance Plan must be prepared by a NH licensed Professional Engineer and shall include the following elements:

- a. The name(s) of the owner(s) for all components of the system.
- b. Maintenance agreements that specify:
 - i. The names and addresses of the person(s) responsible for operation and maintenance.
 - ii. The person(s) responsible for financing maintenance and emergency repairs.
 - iii. A Maintenance Schedule for all drainage structures, including swales and ponds.
 - iv. A list of easements with the purpose and location of each.
 - v. The signature(s) of the property owner(s).
- c. Stormwater Management Easement(s).
 - i. Stormwater management easements to the Town are required for all areas used for off-site stormwater control associated with Town accepted public ways, unless a waiver is granted by the Planning Board.
 - ii. Easements shall be recorded with the Registry of Deeds prior to issuance of a Certificate of Completion/Occupancy.
 - iii. Stormwater management easements shall be provided and located by the property owner(s) as are necessary for:
 - (a) access for facility inspections and maintenance,
 - (b) preservation of stormwater runoff conveyance, infiltration, and detention areas and facilities, including flood routes for the 100-year storm event; and
 - (c) direct maintenance access by heavy equipment to structures requiring regular cleanout maintenance.
- d. Changes to Operation and Maintenance Plans
 - i. The owner(s) of the stormwater management system must notify the Planning Board or its Agent of changes in ownership or assignment of financial responsibility.
 - ii. The maintenance schedule in the Maintenance Agreement may be amended to achieve the purposes of these Stormwater Management Regulations by mutual agreement of the Planning Board and the Responsible Parties. Amendments must be in writing and signed by all Responsible Parties.

Responsible Parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility. Once the amended Plan is signed the Planning Board shall file it at the Registry of Deeds at the expense of the current owner(s).

- 2. The applicant shall provide legally binding documents for filing with the registry of deeds which demonstrate that the obligation for maintenance of Stormwater best management practices and infrastructure runs with the land and that the Town has legal access to inspect the property to ensure their proper function or maintain onsite Stormwater infrastructure when necessary to address emergency situations or conditions.
- 3. The property owner shall bear responsibility for the installation, construction, inspection, and maintenance of all Stormwater management and erosion control measures required by the provisions of these regulations and as approved by the Planning Board, including emergency repairs completed by the town.

Stormwater Management Plan Recordation

- 1. Stormwater management and sediment and erosion control plans shall be incorporated as part of any approved site plan. A Notice of Decision acknowledging the Planning Board approval of these plans shall be recorded at the Registry of Deeds. The Notice of Decision shall be referenced to the property deed (title/book/page number) and apply to all persons that may acquire any property subject to the approved Stormwater management and sediment control plans. The Notice of Decision shall reference the requirements for maintenance pursuant to the Stormwater management and erosion and sediment control plans as approved by the Planning Board.
- 2. The applicant shall submit as-built drawings of the constructed Stormwater management system following construction.
- 3. Easements: Where a development is traversed by or requires the construction of a watercourse or a drainage way, an easement to the Town of adequate size to enable construction, reconstruction and required maintenance shall be provided for such purpose. Easements to the Town shall also be provided for the purpose of periodic inspection of drainage facilities and BMPs should such inspections by the Town become necessary. All easements shall be recorded at the County Registry of Deeds. Where Stormwater management or treatment facilities are constructed outside of public rights of way, a permanent easement to the town shall be recorded to allow construction, maintenance, or inspection of the facility, as well as flowage rights.

Inspection and Maintenance Responsibility

- 1. Municipal staff or their designated agent shall be granted site access to complete routine inspections to ensure compliance with the approved Stormwater management and sediment and erosion control plans. Such inspections shall be performed at a time agreed upon with the landowner.
 - a. If permission to inspect is denied by the landowner, municipal staff or their designated agent shall secure an administrative inspection warrant from the district or superior court under RSA 595-B Administrative Inspection Warrants. Expenses associated with inspections shall be the responsibility of the applicant/property owner.
 - b. If violations or non-compliance with a condition(s) of approval are found on the site during routine inspections, the inspector shall provide a report to the Town documenting these violations or non-compliance including recommend corrective actions. The Town shall notify the property owner in writing of these violations or non-compliance and corrective actions necessary to bring the property into full compliance. The Town, at their discretion, may issue a stop work order if corrective actions are not completed within 10 days.
 - c. If corrective actions are not completed within a period of 30 days from notification, the Planning Board may exercise their jurisdiction under RSA 676:4-a Revocation of Recorded Approval.
- 2. The applicant shall bear final responsibility for the installation, construction, inspection, and disposition of all Stormwater management and erosion control measures required by the Planning Board. Site development shall not begin before the Stormwater Management Plan receives written approval by the Planning Board.
- 3. The municipality retains the right, though accepts no responsibility, to repair or maintain Stormwater infrastructure if: a property is abandoned or becomes vacant; and in the event a property owner refuses to repair infrastructure that is damaged or is not functioning properly.

- 4. Landowners subject to an approved Stormwater Management Plan shall be responsible for submitting an annual report to the Planning Board or other designated responsible municipal entity by September 1 each year by a qualified professional that all Stormwater management and erosion control measures are functioning per the approved Stormwater management plan. The annual report shall note if any Stormwater infrastructure has needed any repairs other than routine maintenance and the results of those repairs. If the Stormwater infrastructure is not functioning per the approved Stormwater management plan the landowner shall report on the malfunction in their annual report and include detail regarding when the infrastructure shall be repaired and functioning as approved. Additionally, the annual report shall include:
 - a. Descriptions of the condition of the BMPs,
 - b. Descriptions of maintenance performed and,
 - c. Receipts showing payment for maintenance performed (or if performed by a staff member, description of work, date of work, and duration of effort should be provided.).

Post-Construction Enforcement

- 1. Enforcement and penalties shall be in compliance with Section 1.10.
- 2. Whenever a property owner, Applicant, Developer, or other responsible party has engaged in conduct prohibited by, or failed to meet a requirement of this Section, the Planning Board may order compliance by notifying the responsible party.
- 3. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of the violation(s).
- 4. Failure to comply within the time specified may subject the responsible party to any and all available penalties, including but not limited to a Stop Work Order, fines, a court order, site approval revocation, and/or abatement by the Town.
- 5. Such penalties shall be cumulative and shall not prevent the Town from pursuing all remedies available in law or equity.
- 6. The Planning Board may withhold, suspend, or revoke any approvals upon discovery of the failure of the property owner, Applicant or Developer to comply with these Regulations.

For reference:

Table 1. Stormwater Infrastructure Design Criteria

Design Criteria	Description Description
Water Quality Volume (WQV)	WQV = (P)(Rv)(A) P = 1 inch of rainfall Rv = unitless runoff coefficient, Rv = 0.05 + 0.9(I) I = percent impervious cover draining to the structure converted to decimal form A = total site area draining to the structure
Water Quality Flow (WQF)	WQF = (q _u)(WQV) WQV = water quality volume calculated as noted above q _u = unit peak discharge from TR-55 exhibits 4-II and 4-III Variables needed for exhibits 4-II and 4-III: Ia = the initial abstraction = 0.2S S = potential maximum retention in inches = (1000/CN) - 10 CN = water quality depth curve number = 1000/(10+5P+10Q-10[Q ² +1.25(Q)(P)] ^{0.5}) P = 1 inch of rainfall Q = the water quality depth in inches = WQV/A A = total area draining to the design structure
Groundwater Recharge Volume (GRV)	$ \begin{array}{l} \text{GRV} = (A_l)(R_d) \\ \text{A}_l = \text{the total area of effective impervious surfaces that will exist on the site after development} \\ \text{R}_d = \text{the groundwater recharge depth based on the USDA/NRCS hydrologic soil group, as follows:} \\ \text{Hydrologic Group} & R_d \text{ (inches)} \\ \text{A} & 0.40 \\ \text{B} & 0.25 \\ \text{C} & 0.10 \\ \text{D} & 0.00 \\ \end{array} $
Channel Protection Volume (CPV)	If the 2-year, 24-hour post-development storm volume <u>does not increase</u> due to development then: control the 2-year, 24-hour post-development peak flow rate to the 2-year, 24-hour predevelopment level. If the 2-year, 24-hour post-development storm volume <u>does increase</u> due to development then: control the 2-year, 24-hour post-development peak flow rate to ½ of the 2-year, 24-hour pre-development level or to the 1-year, 24-hour pre-development level.
Peak Control	Post-development peak discharge rates shall not exceed pre-development peak discharge rates for the 10-year and 50-year, 24-hour storms
EIC and UDC	%EIC = area of effective impervious cover/total drainage areas within a project area x 100 %UDC = area of undisturbed cover/total drainage area within a project area x 100

[After: NH DES Stormwater Manual: Volume2 Post-Construction Best Management Practices Selection & Design (December 2008)